DENON

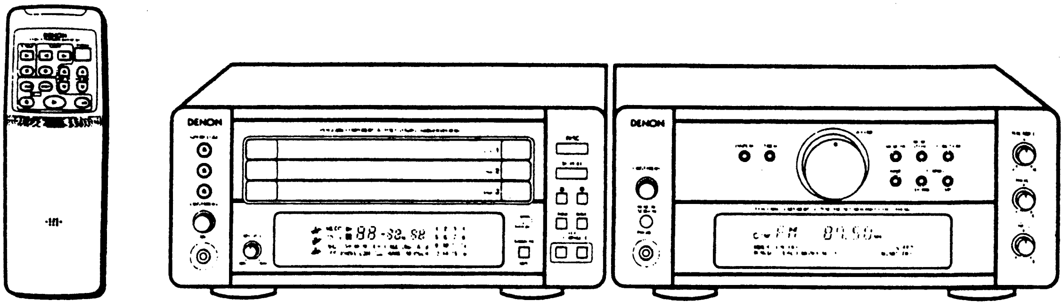
Hi-Fi Personal Component System

SUPPLEMENT

SERVICE MANUAL

MODEL D-M7

PERSONAL COMPONENT SYSTEM



Unit No. UDRA-M7 (Receiver)
Unit No. UDCM-M7 (Compact Disc Player)

This service manual is supplement for already issued service manual of D-M7.
For servicing, refer to the both manuals.

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Receiver Section (UDRA-M7)

ADDENDUM PARTS LIST OF EXPLODED VIEW 4

- Some illustrations using in this service manual are slightly different from the actual set.

NIPPON COLUMBIA CO., LTD.

PARTS LIST OF CD CHANGER MECHANISM UNIT (Part No. : 9LU C004 51)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
LOADER MECH. SECTION				
101	937 0233 003	Main base	1242070025	1
102	937 0233 100	Top board	1242000146	1
103	937 0233 207	Cam guide roller	1242870011	3
104	937 0233 304	Drive pulley	1102860025	2
105	937 0233 401	Idler gear	1242810041	1
106	937 0233 508	Cam gear	1242810042	1
107	937 0233 605	Middle gear	1242810043	1
108	937 0233 702	Tray idler gear	1242810046	12
109	937 0233 809	Main cam	1242410001	1
110	937 0233 906	Front switch lever	1242480078	2
111	937 0234 002	Rear switch lever Ass'y	1242480115	2
112	937 0234 109	Tray lock lever	1242480080	3
113	937 0234 206	Mecha holder	1243450005	1
114	937 0234 303	Stabilizer holder	1243450006	1
115	937 0234 400	Stabilizer	1242140101	1
116	937 0234 507	Mecha holder guide	1243450004	1
119	937 0234 604	Guide tray	1241100051	3
120	937 0234 701	Disk tray	1241100052	3
121	937 0234 808	Switch angle	1242000147	1
122	937 0234 905	Tray change shaft	1242900077	1
123	937 0235 001	Tray switch spring	1242580117	4
124	937 0235 108	Tray lock lever spring	1242580119	3
125	937 0235 111	Disk stop spring	1242580118	1
126	937 0235 205	Tray drive belt	1242710003	1
127	937 0235 302	Cam drive belt	1242710004	1
128	937 0235 409	Magnet	1103730019	1
129	445 0033 005	Nylon band (L=80mm)	1309330057	2
130	937 0235 506	Rubber sheet	1243520009	1
131	937 0235 603	Mecha holder angle	1242000192	1
132	937 0235 700	Change box	1242070027	1
133	937 0235 807	Center gear	1242810044	1
134	937 0235 904	Center tray gear	1242810045	3
135	937 0236 000	Tray drive gear	1242810047	6
136	937 0236 107	Tray change lever	1242480074	3
137	937 0236 204	Top joint lever	1242480075	1
138	937 0236 301	Middle joint lever	1242480076	1
139	937 0236 408	Bottom joint lever	1242480077	1
140	937 0236 602	Motor Ass'y	1246300041 for main cam	1
141	937 0236 602	Motor Ass'y	1246300041 for tray	1
142	937 0236 709	Cam switch	1245300022	2
143	937 0041 606	Tray switch	1305301248	4
201	937 0236 505	Screw 2.6x4	1309700139	4
202	937 0236 518	Screw 2x7	1429700216	3
203	937 0236 521	Screw 2x6	1429700120	3
204	937 0182 947	Screw 2.6x12	1429700072	4
205	937 0231 047	Screw with washer 2.6x10	1129700192	4

Ref. No.	Part No.	Part Name	Remarks	Q'ty
TRAVERES SECTION				
1	937 0121 005	Middle gear	1102810126	1
2	937 0121 102	Draiv gear	1102810127	1
3	937 0121 209	Guide railroller	1102480681	1
4	937 0121 306	Guide shaft	1102900223	1
5	937 0121 403	Gum cushion (gray)	1303260448	2
6	937 0227 103	Pickup unit	1306170020	1
7	937 0164 305	Gum cushion (green)	1103260278	1
8	937 0164 208	Gum cushion (red)	1103260275	1
9	937 0150 607	Chassis with motor Ass'y	1106300208	1
10	937 0122 004	Slide motor Ass'y	1106300207	1
11	937 0122 208	Limit switch	1105300522	1
51	937 0121 801	Screw 2.6x6	1109700937	2
52	937 0121 814	Screw 2x5	1109700938	2
53	937 0121 827	Screw 2x3	1309701564	2
54	937 0121 908	Cut washer ϕ1.5xϕ3.8x0.25mm	1109900315	1

Mechanism Section

(Follow the procedure below in reverse order when reassembling)

1. Traverse Mecha. Ass'y

(1) Take off Top Board by removing 2 screws ①. (Fig. A)
(2) Pull up Tray Change Shaft, and remove Top, Middle and Bottom Joint Levers. (Fig. B)
(3) Lower the Traverse Mecha. by turning Main Cam or Cam Gear to the arrow direction (counterclockwise) to disengage chucking of Disc Tray, and put it in Guide Tray. (Fig. A)
(4) Pull out the Tray part with pressing the front of Change Lever as shown with the arrow A ~ C in turn from the top. (Fig. A)
(5) Turn the Main Cam or Cam Gear until it stops turning as shown in the arrow (clockwise). (Fig. B)
(6) Raise Stabilizer Holder with pressing its side hook and release the hook. (Fig. C)
(7) Turn the Main Cam or Cam Gear again to the arrow direction (clockwise), and align recesses of the Main Cam with projections of Mecha. Holder. (Fig. B, D)
(8) Pull up the Stabilizer Holder to take it off. (Fig. C)
(9) Remove screw ② to take off Mecha. Holder Guide. (Fig. C)
(10) Remove 2 screws ③ to take off Mecha. Holder Angle. (Fig. D)
(11) Pull the Traverse Mecha. Ass'y apart after checking that the projections of the Mecha. Holder correspond with the recesses of the Main Cam. (Fig. D)

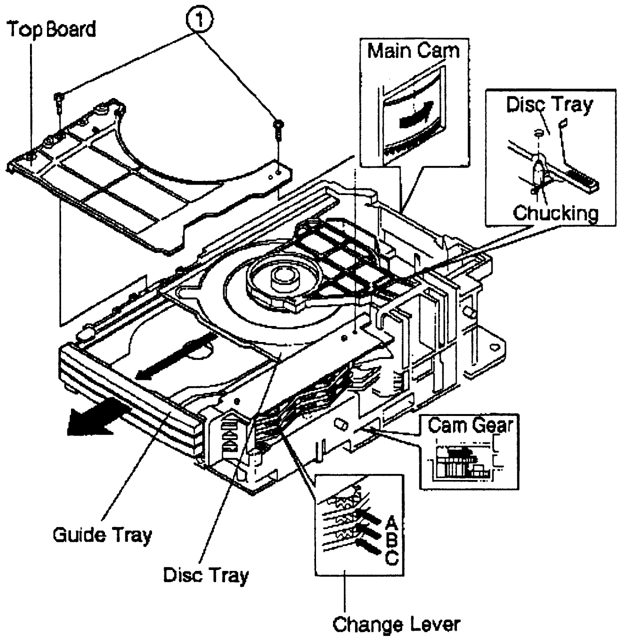

Top Board
①
Main Cam
Disc Tray
Chucking
Cam Gear
A
B
C
Guide Tray
Disc Tray
Change Lever

Fig. A

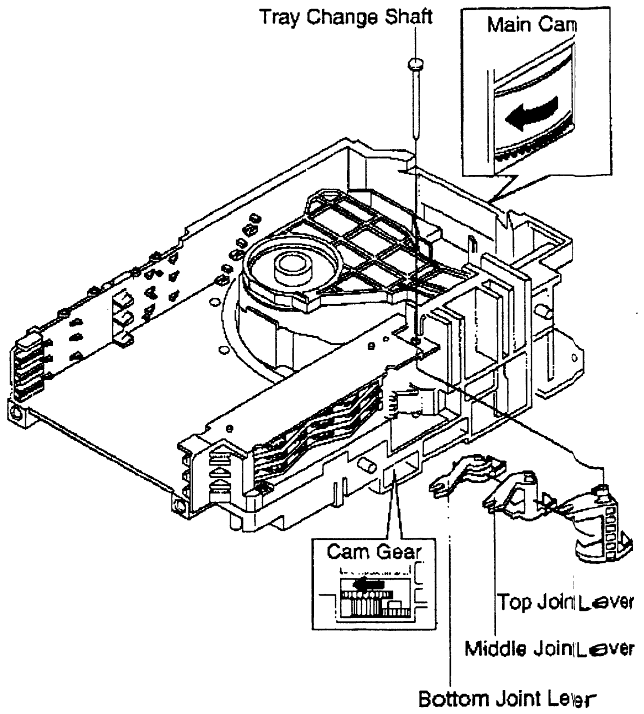

Tray Change Shaft
Main Cam
Cam Gear
Top Joint Lever
Middle Joint Lever
Bottom Joint Lever

Fig. B

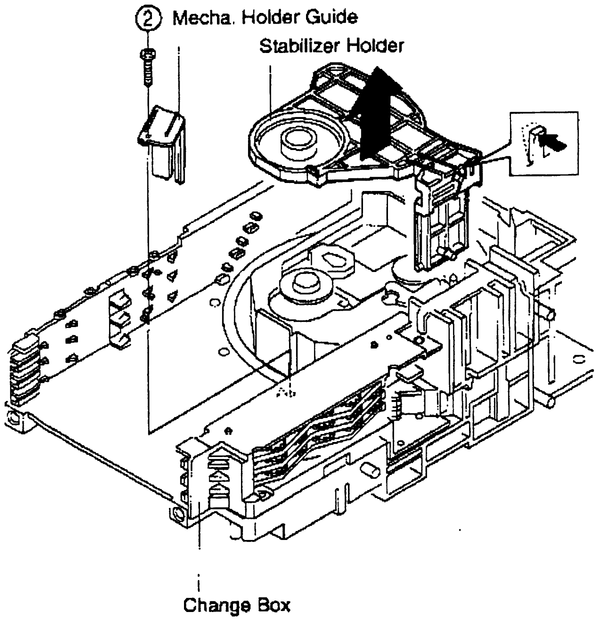

② Mecha. Holder Guide
Stabilizer Holder
Change Box

Fig. C

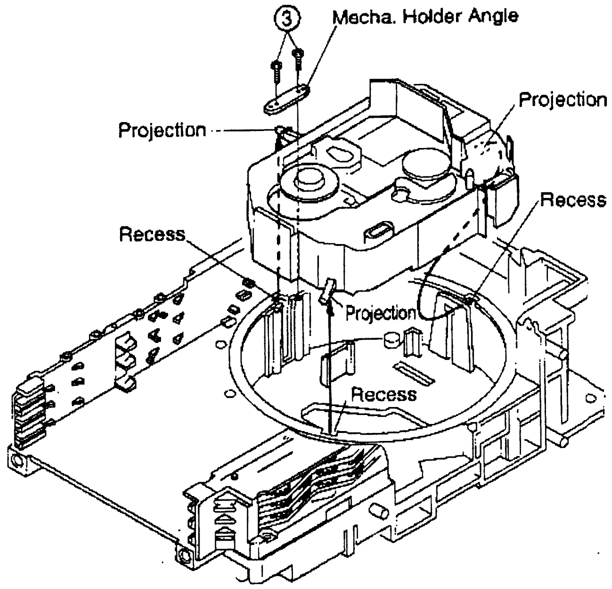

③ Mecha. Holder Angle
Projection
Projection
Recess
Recess
Projection
Recess

Fig. D

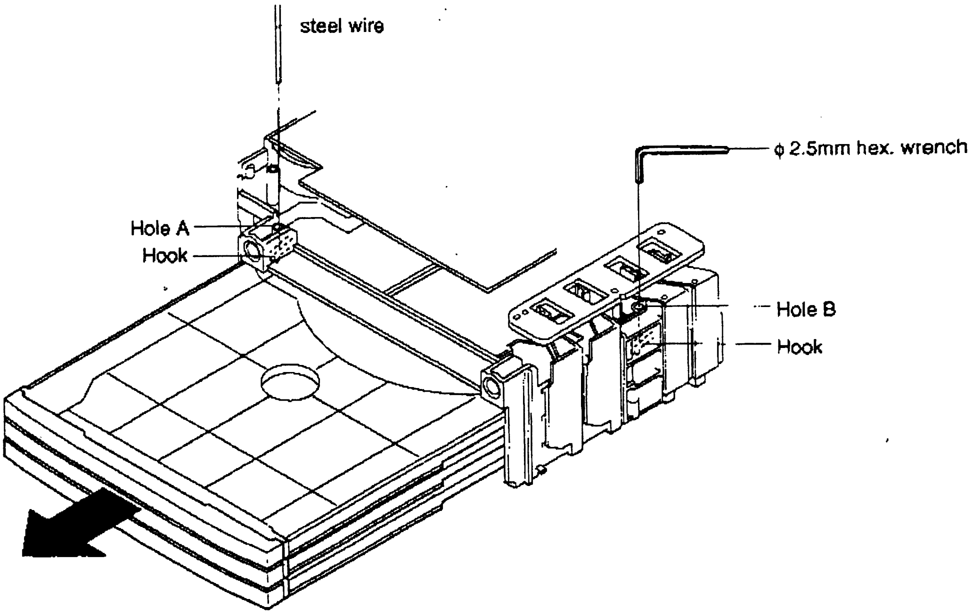
2. Tray 1 ~ 3

(1) Turn the CD Mecha. over.

(2) Insert a steel wire or eyeleteer into the hole A, and φ 2.5mm hex. wrench into the hole B through P.W.B. gap to release both hooks at once, then pull the Tray 3 apart as shown in fig.

* Be careful as the hooks may be broken if pushed hard.

* As to releasing the hole B hook for the Tray 1 and 2, finger pushing through side openings is possible.


steel wire
φ 2.5mm hex. wrench
Hole A
Hook
Hole B
Hook

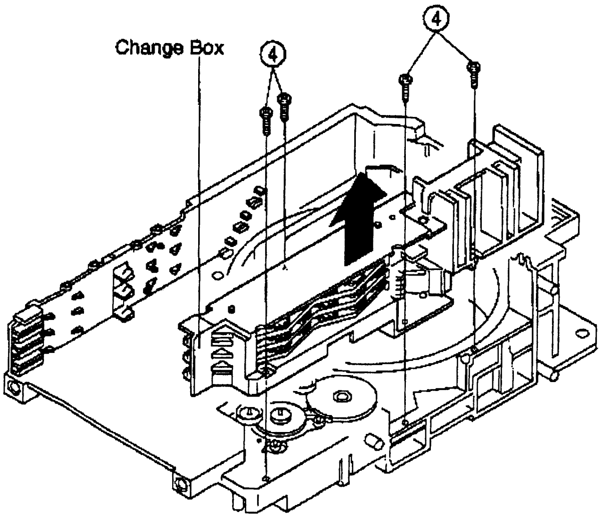
3. Change Box

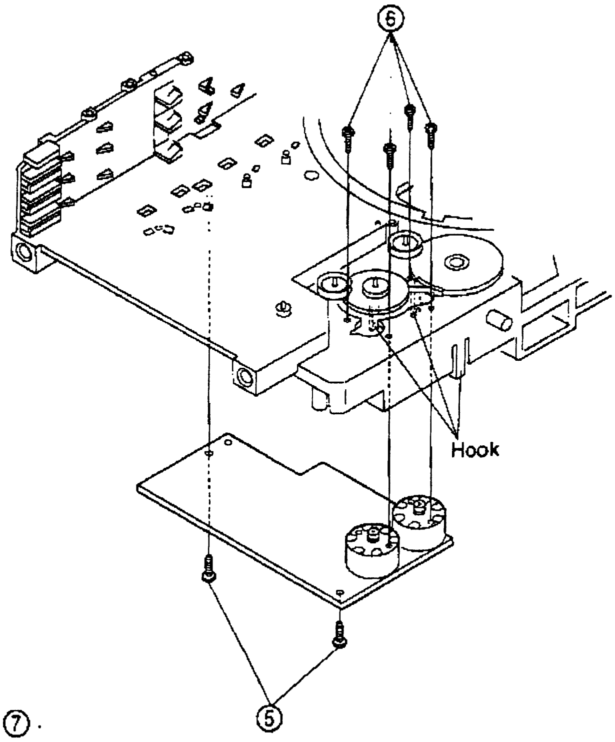
Remove 4 screws ④ and pull up the Change Box.

4. Motor P.W.B.

(1) Remove 2 screws ⑤ from the P.W.B.

(2) Detach the P.W.B. by removing 4 screws ⑥ and 3 hooks.


Change Box
④
④

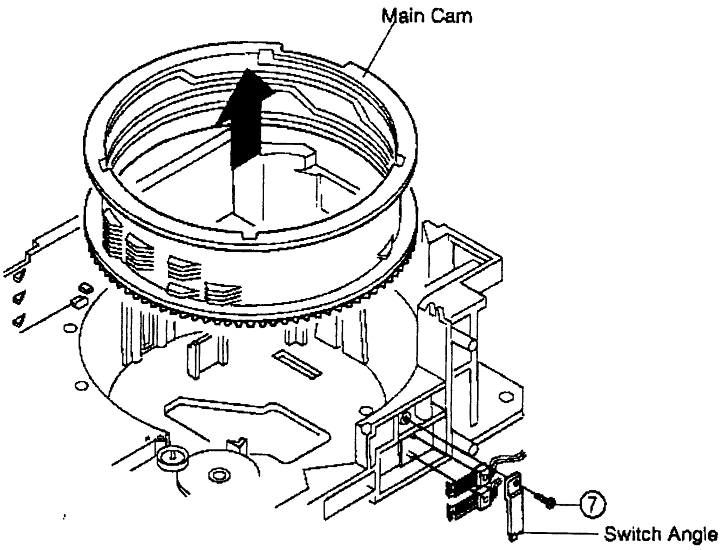


5. Main Cam

(1) Take off Switch Angle and Cam Switch by removing screw ⑦.

(2) Pull the Main Cam apart in the arrow direction.

* Cord colors of the Switch Angle are red, brown, orange, green, yellow and blue from the top.

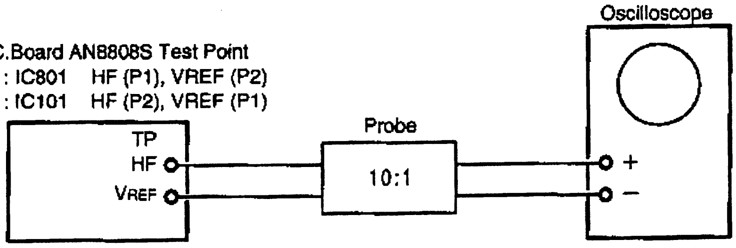

Main Cam
⑦
Switch Angle

CD WAVEFORM CONFIRMATION

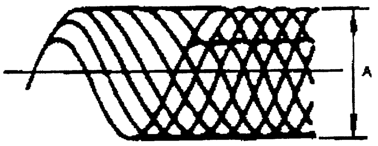
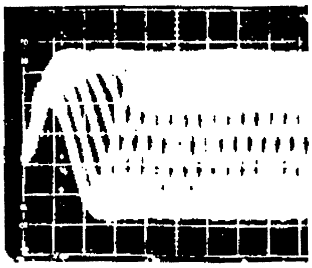
1. HF level Confirming

Connection

CD P.C.Board AN8808S Test Point
UD-M5 : IC801 HF (P1), VREF (P2)
D-M7 : IC101 HF (P2), VREF (P1)


Oscilloscope
TP
HF
VREF
Probe
10:1
+
−

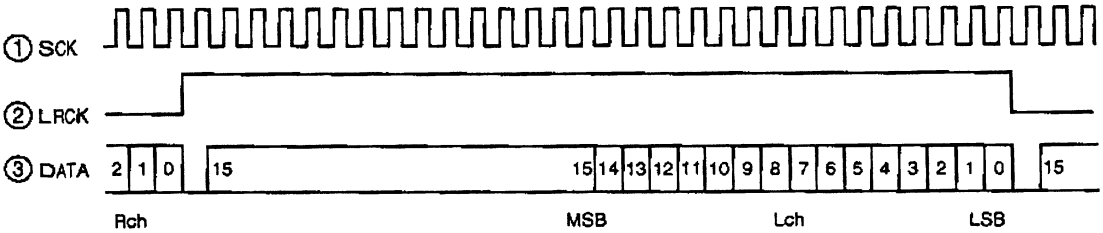
Test Disc: Tomita Yasuko (CA1094)
or MO (TCD-784)

Oscilloscope		Check	Step
V	H	(Oscilloscope)	1. Push ▶ button. 2. Check HF level of oscilloscope. 3. Confirm that the waveform is in good shape. (◇ eye pattern in center must be discriminated clearly.)
50mV/div or 20mV/div	0.2µs/div or 0.5µs/div	 A=0.3~0.7V 	
• Set input mode to ALTERNATE or CHOPPER.			

2. Servo IC Output Waveform

(D-M7: IC102, UD-M5: IC802 MN662720RB Pin ① ~ ③)

Rch when LRCK = "L", Lch when LRCK = "H"


① SCK
② LRCK
③ DATA
2
1
0
15
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
15
Rch
MSB
Lch
LSB

DENON
ELECTRONIC GMBH
Halskestraße 32 · 40880 Ratingen

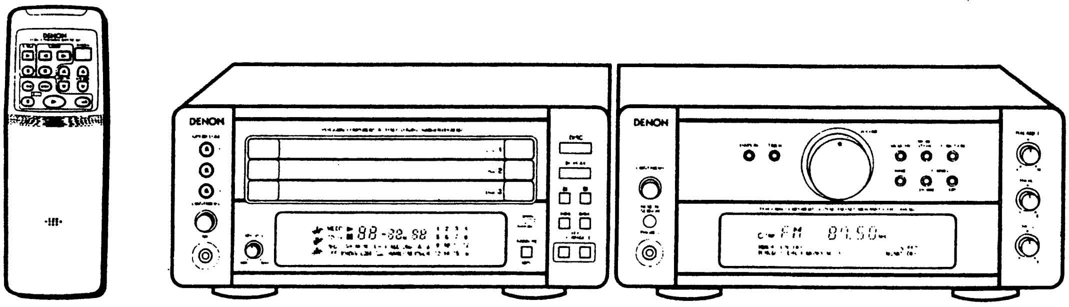
DENON

Hi-Fi Personal Component System

SERVICE MANUAL

MODEL D-M7

PERSONAL COMPONENT SYSTEM



Unit No. UDRA-M7 (Receiver)
Unit No. UDCM-M7 (Compact Disc Player)

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- ● Some illustrations using in this service manual are slightly different from the actual set.

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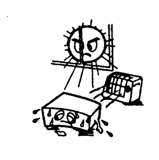
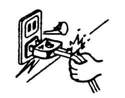
GENERAL SECTION

OPERATING INSTRUCTORS

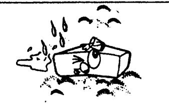
NOTE ON USE / HINWEISE ZUM GEBRAUCH OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO



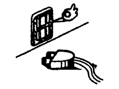
- Avoid high temperatures
  Allow for sufficient heat dispersion when installed on a rack
- Vermeiden Sie hohe Temperaturen
  Beachten Sie, daß eine ausreichend Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird
- Eviter des températures élevées
  Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère
- Evitate di esporre l'unità a temperature alte
  Assicuratevi che ci sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio



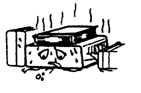
- Handle the power cord carefully
  Hold the plug when unplugging the cord
- Gehen Sie vorsichtig mit dem Netzkabel um
  Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen
- Manipuler le cordon d'alimentation avec précaution.
  Tenir la prise lors du débranchement du cordon.
- Maneggiate il filo di alimentazione con cura
  Agite per la spina quando scollegate il cavo dalla presa.



- Keep the set free from moisture, water, and dust
- Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere

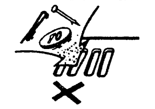


- Unplug the power cord when not using the set for long periods of time
- Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes
- Disinnestate il filo di alimentazione quando avete l'intenzione di non usare il filo di alimentazione per un lungo periodo di tempo

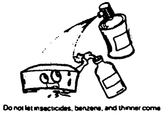


*(For sets with ventilation holes)

- Do not obstruct the ventilation holes
- Die Belüftungsöffnungen durfen nicht verdeckt werden
- Ne pas obstruer les trous d'aération
- Non coprite i fori di ventilazione



- Do not let foreign objects in the set
- Keine fremden Gegenstände in das Gerät kommen lassen
- Ne pas laisser des objets étrangers dans l'appareil
- E' importante che nessun oggetto è inserito all'interno dell'unità



- Do not let insecticides, benzene, and thinner come in contact with the set.
- Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil
- Assicuratevi che l'unità non venga in contatto con insetticidi, benzolo o solventi.

- Never disassemble or modify the set in any way
- Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verandern
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre
- Non smontate mai, nè modificate l'unità in nessun modo.

CAUTION / VORSICHT / ATTENTION / AVVISO

- If the system should smoke or produce strange smells, immediately set the power operation switch to the STANDBY position, unplug the power cord, and contact your store of purchase.
- Sollte das Gerät Rauch produzieren oder eigenartig riechen, stellen Sie den Netzschalter sofort auf die Position STANDBY (Bereitschaft), ziehen Sie den Netzstecker heraus und kontaktieren Sie Ihren Händler.
- Si de la fumée sort de la chaîne ou des odeurs bizarres, placer l'interrupteur de fonctionnement de l'alimentation immédiatement sur la position de veille (STANDBY), débrancher le cordon d'alimentation et contacter le distributeur.
- Qualora il sistema dovesse produrre del fumo o degli odori strani, collocate immediatamente l'interruttore di stato di operatività è acceso nella posizione STANDBY, disinnestate il filo di alimentazione e rivolgetevi al negozio dell'acquisto.

SAFETY IMPORTANT

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

ATTENZIONE: QUESTO APPARECCHIO E' DOTATO DI DISPOSITIVO OTTICO CON RAGGIO LASER.
L'USO IMPROPRIO DELL'APPARECCHIO PUO' CAUSARE PERICOLOSE ESPOSIZIONI A RADIAZIONI!

"SERIAL NO.____________________

PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF THE CABINET FOR FUTURE REFERENCE"

- **INSTALLATION PRECAUTIONS**

For heat dispersal, leave at least 10 cm of space between the top, back and sides of this unit and the wall or other components.

- **VORKEHRRUNGEN ZUR INSTALLATION**

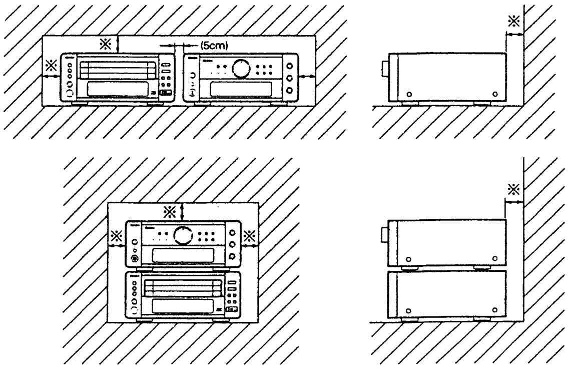
Lassen Sie zur Wärmeverteilung mindestens 10 cm Raum zwischen der Oberseite, der Rückseite und den Seiten des Gerätes und der Wand oder anderen Komponenten.

- **PRECAUTIONS D'INSTALLATION**

Afin de disperser la chaleur, laisser un espace d'au moins 10 cm entre le haut, l'arrière les côtés de cet appareil et le mur ou un autre composant.

- **PRECAUZIONI RIGUARDANTI L'INSTALLAZIONE**

Per consentire una buona dispersione del calore, lasciate uno spazio di almeno 10 cm tra le parti superiore, posteriore e laterali di quest'unità e le parete o gli altri componenti.



※ 10 cm or more
10 cm oder mehr
10 cm ou plus
10 cm o più

※ Wall
Wand
Mur
Parete

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

ADVARSEL:	**USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.**
VAROITUS!	**LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.**
VARNING–	**OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.**

"CLASS 1
LASER PRODUCT"

TUNER–AMPLIFIER
RADIO–VERSTÄRKER
TUNER–AMPLIFICATEUR
SINTONIZZATORE–AMPLIFICATORE
SINTONIZADOR–AMPLIFICADOR
TUNER–VERSTERKER
RECEIVER
SINTONIZADOR–AMPLIFICADOR

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Sehen Sie DEUTSCH Seite 24.
Voir FRANÇAIS Page 42.
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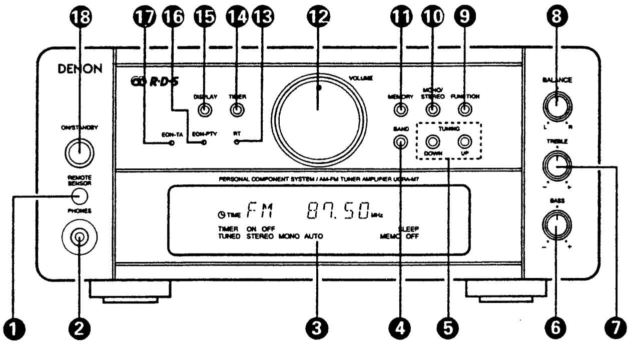
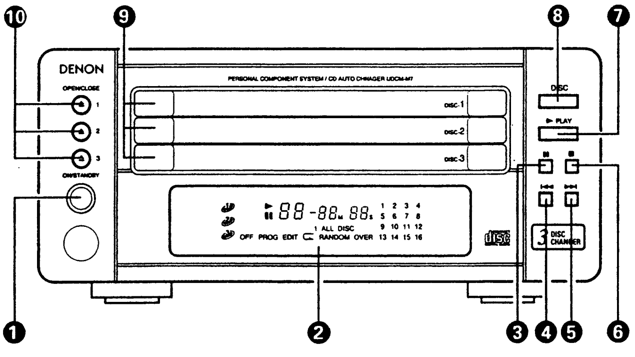
Se SVENSKA sid 115.
Veja em PORTUGUÊS página 133.



UDRA-M7

CD AUTO CHANGER
CD–AUTO–WECHSLER
CHANGEUR CD AUTO
CAMBIADISCHI AUTOMATICO CD
CAMBIADOR AUTOMÁTICO DE CD
AUTOMATISCHE CD–WISSELAAR
CD–VÄXLARE
CARREGADOR AUTOMÁTICO DE CDs

See ENGLISH Page 7.
Sehen Sie DEUTSCH Seite 25.
Voir FRANÇAIS Page 43.
Fate riferimento alla sezione ITALIANO alla pagina 61.
Consulte la página 80 para ESPAÑOL.
Zie NEDERLANDS bladzijde 98.
Se SVENSKA sid 116.
Veja em PORTUGUÊS página 134.



UDCM-M7

- As an aid to better understanding the operation method, the illustrations used in this manual may differ from the actual system.
- Als Hilfestellung zum besseren Verständnis der Betriebsmethode, erlauben wir uns den Hinweis, daß sich die Abbildungen in dieser Bedienungsanleitung leicht von dem aktuellen System unterscheiden.
- Pour faciliter la compréhension de la méthode de fonctionnement, les illustrations utilisées dans ce manuel peuvent être différentes de celles de la chaine réelle.
- Per rendere la spiegazione del metodo operativo più facile, le illustrazioni usate in questo libretto delle istruzioni possono differire dal sistema stesso.
- Como ayuda a un mejor entendimiento del método de funcionamiento, las ilustraciones utilizadas en este manual puede diferir del sistema real.
- Als bijkomende hulp om de bedieningsmethode beter te begrijpen, is het mogelijk dat de afbeeldingen die in deze handleiding zijn gebruikt verschillen van het eigenlijke systeem.
- Illustrationerna i bruksanvisningen hjälper dig försaå de olika funktionerna. Studera dem noga. (Vissa illustrationer kan skilja sig lite grann från din apparat.)
- Como ajuda para uma melhor compreensão do método de funcionamento, as ilustrações utilizadas neste manual podem diferir do verdadeiro sistema.

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Check that the following parts are included in the package aside from the main unit:

- **UDRA-M7 (Tuner–amplifier unit)**
  - FM antenna 1
  - AM loop antenna 1
  - Remote control unit (RC–828) 1
  - R6P/AA batteries 2
  - Operating instructions 1
- **UDCM-M7 (CD auto changer unit)**
  - System connector cable 1
  - RCA pin–plug cord 1

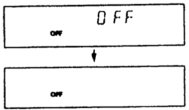
1 MAIN FEATURES

- **RDS compatible**
  Compatible with various RDS services, including program service name (PS), program type identification (PTY), traffic program identification (TP), clock time (CT), radio text message (RT) and enhanced other network (EON).
- **Quality power for high quality sound**
  30W + 30W (6 Ω/ohms, DIN) high quality amplifier and terminals for large speakers.
- **High sound quality, multi–function CD auto changer**
  Edit function for automatically dividing the tracks on a CD for recording onto sides A and B of a tape.
- **Two types of timers**
  Two timer settings can be made — everyday and sleep.
- **Easy–to–use remote control unit**
- **Auto on function**
  The power turns on automatically and playback begins when the play button on the CD auto changer or the cassette deck or the tuner preset up/down buttons on the remote control unit are pressed.

2 BEFORE USING

Read the following before using the system.

- **Before turning on the power**
  Check again that all connections are correct and that there are no problems with the connection cords. Be sure to unplug the power cord before connecting or disconnecting the connection cords.
- Humming may be produced if this system is set near a TV or other audio equipment. If this happens, try changing the position of the equipment or the connection cords.
- **Moving the system**
  Be sure to remove CDs before moving the system. If a CD is left in the CD auto changer, it may be scratched.
  When shipping, first specify the disc using the disc selector button, press the ON/STANDBY button to turn the off the "OFF" indicator, then unplug the power cord.



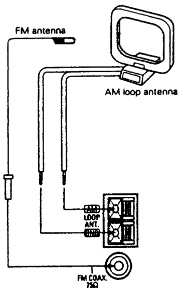
To prevent short–circuits or damage to the connection cords, always unplug the power cord and disconnect all connection cords to other audio equipment.

- **Condensation (dew)**
  Condensation (water droplets) may be produced on internal optical lenses or discs in the following cases:
  - Directly after a heater is turned on.
  - When the system is in a steamy or humid room.
  - When the system is moved abruptly from a cold place (room) to a warm room.
- **Should condensation occur:**
  The signals on the disc cannot be read and the system will not function properly. Remove the disc then let the system set with the power on. The condensation will evaporate in one hour or less, at which time the system will function normally.
- Note that some of the illustrations used for explanations in this manual may differ from the actual system.

3 CONNECTING THE INCLUDED ANTENNAS

Installing the FM indoor antenna

Tune in an FM station (see Page 10), set the antenna in a position in which distortion and noise is minimum, then fasten the tip of the antenna in this position using tape or a pin.


FM antenna
AM loop antenna
AM
LOOP ANT.
GND
FM COAX 75Ω

Connecting an FM outdoor antenna

If good reception cannot be achieved with the included FM antenna, use an FM outdoor antenna. Connect an F–shaped connector to the coaxial cable and connect the antenna to the FM COAX (75 Ω/ohms) terminal.

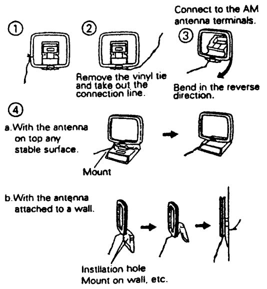
Selecting a place for the FM outdoor antenna

- Set the antenna so that it is pointing towards the broadcast station's transmitting antenna. Behind buildings or mountains, set the antenna in the position at which reception is best, and also try changing the direction of the antenna.
- Do not install the antenna under power lines.
  Doing so is extremely dangerous, as the power line could touch the antenna.
- Install the antenna away from roads or train tracks to avoid noise from cars or trains.
- Do not install the antenna too high, as it may be hit by lightning

Installing the AM loop antenna

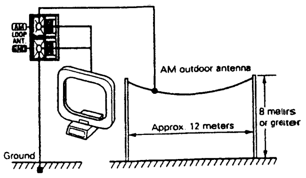
Tune in an AM station (see Page 10) and set the antenna in a position as far from the system as possible in which distortion and noise is minimum. In some cases it is best to invert the polarities. AM broadcasts cannot be received well if the loop antenna is not connected or if it is set close to metal objects.

Assembling the AM loop antenna


Connect to the AM antenna terminals.
①
②
③
Remove the vinyl tie and take out the connection line.
Bend in the reverse direction.
④
a. With the antenna on top any stable surface.
Mount
b. With the antenna attached to a wall.
Instllation hole
Mount on wall, etc.

Installing an AM outdoor antenna

Connect the signal wire from the AM outdoor antenna to the antenna terminal. Be sure to ground the antenna and connect the ground wire to the GND terminal. Also be sure to connect the included AM loop antenna.

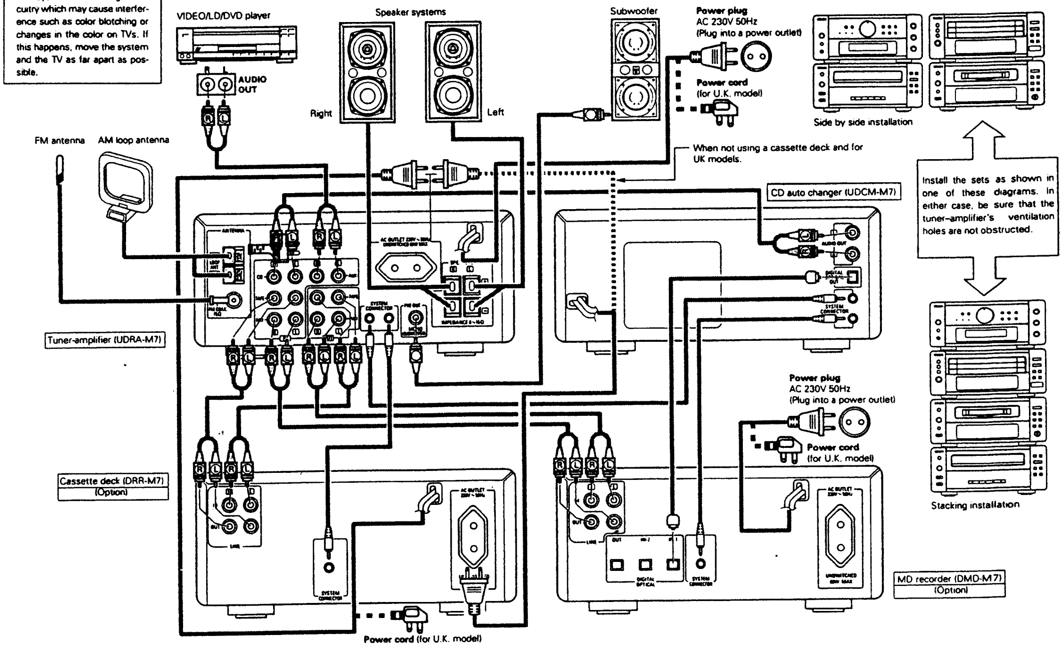

AM
LOOP ANT.
GND
AM outdoor antenna
8 meters or greater
Approx. 12 meters
Ground

4 CONNECTIONS

NOTE:
This system includes digital circuitry which may cause interference such as color blotching or changes in the color on TVs. If this happens, move the system and the TV as far apart as possible.

Connecting the speaker systems
Connect the speaker system for the left channel (the left side as seen from the front) to the "L" terminals, the speaker system for the right channel to the "R" terminals. Be sure to use speaker systems with an impedance of 6 Ω/ohms or greater.

CAUTION:
Whenever the power switch is in the STANDBY position, the unit is still connected on AC line voltage.
Please be sure to unplug the cord when you leave home for, say, a vacation.


VIDEO/LD/DVD player
R
L
AUDIO OUT
Speaker systems
Right
Left
Subwoofer
Power plug
AC 230V 50Hz
(Plug into a power outlet)
Power cord
(for U.K. model)
Side by side installation
FM antenna
AM loop antenna
When not using a cassette deck and for UK models.
CD auto changer (UDCM-M7)
AUDIO OUT
DIGITAL OUT
SYSTEM CONNECTOR
Tuner-amplifier (UDRA-M7)
ANTENNA
AC OUTLET
Power plug
AC 230V 50Hz
(Plug into a power outlet)
Power cord
(for U.K. model)
Cassette deck (DRR-M7)
(Option)
LINE
SYSTEM CONNECTOR
AC OUTLET
DIGITAL OPTICAL
UNSWITCHED
Stacking installation
MD recorder (DMD-M7)
(Option)
Power cord (for U.K. model)

Install the sets as shown in one of these diagrams. In either case, be sure that the tuner–amplifier's ventilation holes are not obstructed.

For U.K. models, only UDCM–M7 has 2–pin plug (other unit, 3–pin plug.
So only UDCM–M7 can plug into the AC outlet on UDRA–M7.

System operations
System operations, such as the timer and the auto on functions, as well as remote control operations cannot be performed unless all the RCA pin–plug cords and system connector cords are connected between the units, so be sure to make all the connections properly as shown in the diagram. Also, disconnecting system connectors while the system is operating may result in malfunction. Be sure to turn unplug the power cord before changing connections.

NOTES:
- Do not plug the power cord into the power outlet until all connections are completed. Be sure to interconnect the channels (L to L (white) and R to R (red) properly, as shown on the diagram.
- Insert the plugs securely. Incomplete connections may result in noise
- Be sure to connect the speaker cords between the speaker terminals and the speaker systems with the same polarities (+ to +, − to −) If the polarities are switched, the sound at the center will be weak, the position of the different instruments will be unclear, and the stereo effect will be lost
- After unplugging the power cord, wait about 5 seconds before plugging it back in.
- Note that setting the connection cords (pin–plug cords) next to the power cords may result in humming or other noise
- The total power consumption of equipment connected to the AC outlets is 60 W. Only use the outlets for D–M7 series components

5 PART NAMES, FUNCTIONS AND DISPLAYS

TUNER–AMPLIFIER

① **REMOTE SENSOR**
When operating the remote control unit, point it at this sensor.

② **PHONES (headphones jack)**
Plug the headphones into this jack.
No sound is produced from the speakers when headphones are plugged in.

③ **Display**

④ **BAND (AM / FM) selector button**
The band switches between AM and FM each time this button is pressed.

⑤ **TUNING UP and DOWN buttons**
These buttons are used to select AM and FM stations and to set the clock and timer.

⑥ **BASS control**
Use this to adjust the volume of the low frequencies.

⑦ **TREBLE control**
Use this to adjust the volume of the high frequencies.

⑧ **BALANCE control**
Use this to adjust the balance of the volume between the left and right channels. When set at the center position, the volume is the same for the left and right channels.

⑨ **FUNCTION (input) selector button**
Use this to select the input (function).
The input changes in the following order each time this button is pressed: CD, TAPE, TUNER, MD and AUX. (The function changes automatically when the system's CD player or cassette deck is played or when a preset channel is recalled on the tuner.)

⑩ **MONO / STEREO selector button**
AUTO mode:
Use this mode to receive programs in stereo.
The sound and the indicators on the display automatically switch between monaural ("MONO") and stereo ("STEREO") according to whether the program is being broadcast in monaural or stereo.
MONO mode:
Use this mode to receive programs in monaural, regardless of whether they are being broadcast in monaural or stereo.
Set this mode if there is much noise or if the signals are weak when receiving stereo programs (when "AUTO" is lit).

⑪ **MEMORY button**
This button is used to preset AM and FM stations and when setting the timer.

⑫ **VOLUME control**
Use this to adjust the overall volume.
The volume increases when the control is turned clockwise (↻) and decreases when it is turned counterclockwise (↺).

⑬ **RT indicator**
This lights in green when a radio station offering an RT service is tuned in.
The indicator lights in red when the RT mode is selected.
When the RT message is displayed, the indicator flashes in green.

⑭ **TIMER button**
Press this when setting the timer and to turn the timer on so that it operates at the set times.
When the button is pressed after the timer has been set, the timer standby mark (" ◷ ") appears on the display.
Press again to turn the mark off.
The timer will not operate when the " ◷ " mark is off.

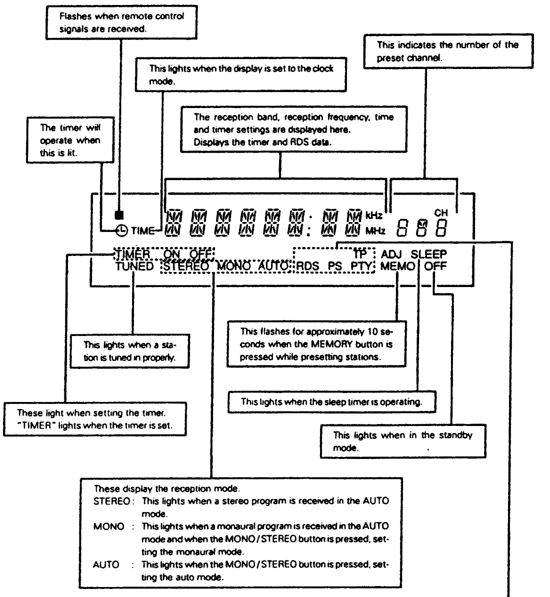
⑮ **DISPLAY selector button**
This button is used to switch the display between the reception frequency (function) and the clock.

⑯ **EON–PTY indicator**
This lights in green when an EON station with PTY information is being received.
When the EON PTY mode is selected, the indicator lights in red.
The indicator flashes in green when another broadcast station in the same network is automatically tuned in and a broadcast of the desired program type is being received.

⑰ **EON–TA indicator**
This lights in green when an EON station with traffic announcements is being received.
When the EON TA mode is selected, the indicator lights in red.
The indicator flashes in green when another broadcast station in the same network is automatically tuned in and a traffic announcement is being received.

⑱ **Power operation switch (ON / STANDBY)**
This turns the power for the entire system on and off.
Press this once to turn the power on, then press again to set the power to the standby mode.

TUNER–AMPLIFIER DISPLAY



Flashes when remote control signals are received.

This lights when the display is set to the clock mode.

This indicates the number of the preset channel.

The timer will operate when this is lit.

The reception band, reception frequency, time and timer settings are displayed here.
Displays the timer and RDS data.

This lights when a station is tuned in properly.

This flashes for approximately 10 seconds when the MEMORY button is pressed while presetting stations.

This lights when the sleep timer is operating.

These light when setting the timer.
"TIMER" lights when the timer is set.

This lights when in the standby mode.

These display the reception mode.
STEREO : This lights when a stereo program is received in the AUTO mode.
MONO : This lights when a monaural program is received in the AUTO mode and when the MONO / STEREO button is pressed, setting the monaural mode.
AUTO : This lights when the MONO / STEREO button is pressed, setting the auto mode.

- RDS (Radio Data System)
  When the RDS button is pressed, a station is searched for and automatically tuned in, the "RDS" indicator lights and the station's name is displayed on the frequency display.
- PTY (Program Type)
  This indicator lights when the type of RDS program is specified.
- TP (Traffic Program)
  "TP" lights when an RDS traffic information station is received.
- PS (Program Service name)
  This lights when the station name is displayed.

NOTE:
- The timer standby mark (" ◷ ") does not light if the current time and the timer have not been set.

CD AUTO CHANGER

① **Power operation switch (ON / STANDBY) button**
Press this once to turn the CD auto changer's power on, then press again to set the CD auto changer to the standby mode. In the standby mode, "OFF" appears on the display.

② **Display**

③ **II (pause) button**
Press this button to stop playback temporarily.
Press the play button to cancel the pause mode and resume playback.

④ **⏮ (automatic search reverse) button**
Use this to move to the beginning of a specific track.
When pressed during playback or in the pause mode, the pickup moves backward a number of tracks equal to the number of times the button is pressed.

⑤ **⏭ (automatic search forward) button**
Use this to move to the beginning of a specific track.
When pressed during playback or in the pause mode, the pickup moves forward a number of tracks equal to the number of times the button is pressed.

⑥ **■ (stop) button**
Press this button to stop playback.

⑦ **▶ PLAY button**
Press this button to start playing the disc.
Even when the disc tray is open, the disc tray closes and playback begins when this button is pressed.
When pressed in the standby mode, the power automatically turns on and playback begins. (Auto on function)

⑧ **DISC button**
Press this button to select the disc number. The Disc No. indicator changes each time the button is pressed. The disc whose indicator changes each time the button is pressed. The disc whose indicator is can be played.

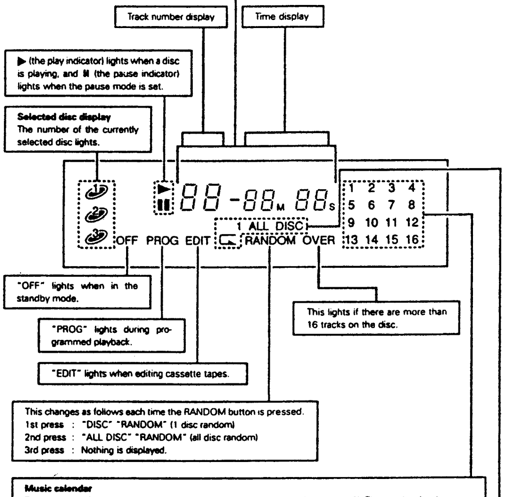
⑨ **Disc tray**
Load discs here.

⑩ **⏏ OPEN / CLOSE button**
Press this to open and close the disc tray.
When pressed once, the disc tray opens out, and when pressed again, the disc tray closes. If a disc is loaded, the total number of tracks and total playing time of the disc are displayed several seconds after the disc tray is closed.
When pressed in the standby mode, the CD auto changer's power turns on.

CD AUTO CHANGER DISPLAY

The following is displayed on the track number display:
- When the disc's data cannot be read properly 00
- In the stop mode .... Total number of tracks
- In the play and program modes .... Track number

The following is displayed on the time display:
- When the disc's data cannot be read .... 00. 00.
- In the stop mode .... Total playing time
- In the play and pause modes .... Elapsed time for current track
- In the program mode .... Elapsed time of programmed tracks



Track number display

Time display

▶ (the play indicator) lights when a disc is playing, and II (the pause indicator) lights when the pause mode is set.

Selected disc display
The number of the currently selected disc lights.

"OFF" lights when in the standby mode.

"PROG" lights during programmed playback.

"EDIT" lights when editing cassette tapes.

This lights if there are more than 16 tracks on the disc.

This changes as follows each time the RANDOM button is pressed.
1st press : "DISC" "RANDOM" (1 disc random)
2nd press : "ALL DISC" "RANDOM" (all disc random)
3rd press : Nothing is displayed.

Music calendar
The numbers of the tracks on the disc are displayed here (up to track number 16). The number for the corresponding track turns off after that track is played.
During programmed playback, the numbers of the programmed tracks are displayed (up to track number 16).
All the numbers light if the disc's data cannot be read properly.

This changes as follows each time the REPEAT button is pressed:
1st press : ⮌ 1 (single–track repeat) is displayed and the number of the track to be repeated on the music calendar lights.
2nd press : ⮌ DISC (1 disc all–track repeat) is displayed.
3rd press : ⮌ ALL DISC (all disc all–track repeat) is displayed.
4th press : Nothing is displayed.

6 REMOTE CONTROL UNIT

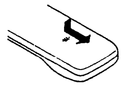
The D–M7 comes with a system remote control unit (RC–828).

Inserting the batteries

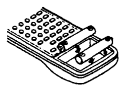
NOTES:

- Use R6P (AA) batteries in this remote control unit.
- Replace the batteries with new ones approximately once each year, though this depends on how frequently the remote control unit is used.
- Replace the batteries with new ones earlier if the remote control unit does not operate even from a short distance.
- Insert the batteries in the proper + and – direction, following the marks in the battery compartment.
- Remove the batteries when not using the remote control unit for extended periods of time.
- To avoid damage and leakage:
  - Do not use a new battery with an old one.
  - Do not use two different types of batteries.
  - Do not short–circuit, take apart, heat or dispose of batteries in flames.
- If the batteries should leak, carefully wipe the fluid out of the battery compartment, then insert new batteries.

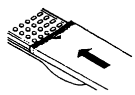
① Open the battery compartment cover on the back of the remote control unit.
Press the knob and open the cover in the direction of the arrow.



② Insert the two R6P (AA) batteries, following the + and – marks in the battery compartment.



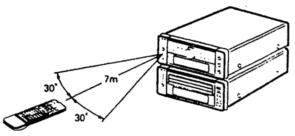
③ Close the cover of the battery compartment.



Using the Remote Control Unit

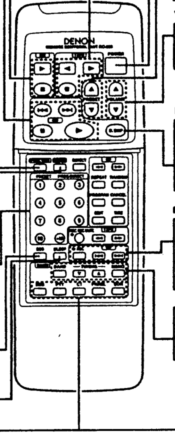
Cautions on Use

- The remote control unit may not operate if the remote sensor is exposed to direct sunlight or the strong light from a lighting fixture, or if there is an obstacle between the remote control unit and the remote sensor.
- Do not press buttons on the remote control unit and on the set at the same time. Doing so could result in malfunction.
- If the remote control unit is pointed away from the remote sensor during continuous operations (such as when turning the volume up or down), the operation will stop. If this happens, point the remote control unit at the remote sensor and press the button again.



- The remote sensor is located on the pre–main amplifier. Point the remote control unit at the remote sensor as shown on the diagram when operating it.
The remote control unit will operate from a direct distance of approximately 7 meters, but this distance will be shortened if obstacles are present or if operated at an angle.
(The remote control unit will operate at an angle of up to 30° in either direction.)

Remote Control Unit Part Names and Functions



MD recorder operation buttons

▶ (play) button
■ (stop) button

CD operation buttons

■ (stop) button
Press this button to stop playback.

▶ (play) button
Press this button to start playback.

⏮ and ⏭
(automatic search buttons)
Use these buttons to search for the beginning of the desired track.

FUNCTION selector button

Press this button to switch the input (function).
The input changes in the following order each time this button is pressed:
→ CD → TAPE → TUNER → MD → AUX

TUNER button

Press this button to recall preset stations from the remote control unit using the number buttons.

Number buttons

Press these buttons after pressing the TUNER button to recall preset stations.
When playing a CD, press these buttons after pressing the DIRECT or PROGRAM button to specify the desired track.

SDB (Super Dynamic Bass) button

Press this for a sound with more powerful base.

SLEEP button

Press this button to set the sleep timer.

Cassette deck operation buttons

■ (stop) button
Press this button to stop the tape.

▶ (forward play) button
Press this to start playback or recording in the forward direction.

◀ (reverse play) button
Press this to start playback or recording in the reverse direction.

POWER operation switch

Use this switch to turn on the power of the entire system or set the power to the standby mode.

PRESET buttons

Use these buttons to recall preset stations on the tuner.

VOLUME buttons

Use these to adjust the volume.
The volume increases when the ▲ button is pressed and decreases when the ▼ button is pressed.

D. SKIP button

Press this button to select the disc number. The DISC NO. indicator changes each time the button is pressed. The disc whose indicator is lit can be played.

MD recorder buttons

● REC (recording) button
⏮ (automatic search reverse) button
⏭ (automatic search forward) button

BAND (AM / FM) selector button
TUNING buttons
MEMO button

RDS button
Use this button to automatically tune to stations using the radio data system.

OFF → RDS → PTY → TP

PTY button
Press this button after selecting "PTY" with the RDS button to select one of the 15 program types

CT button
Use this to correct the time of the clock on the UDRA–M7. Press this button when the time service of an RDS station is being properly received.
" CT " and " TIME " are displayed for 2 seconds and the UDRA–M7's clock is corrected. " NO CT " is displayed if the RDS station does not offer a time service and when the broadcast is not being received properly.

PANEL button
This button is used to select the panel mode.
Press this button when receiving RDS stations to select the frequency, PS, PTY or RT display.
The display mode changes as follows each time the button pressed.

PS → PTY → Frequency → RT

Note that this button will not function if the reception is poor.

OFF → EON TA → EON PTY → EON TA / EON PTY

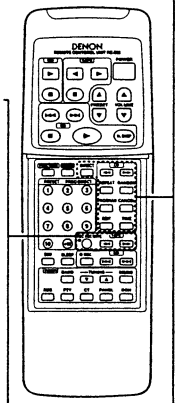
EON button
Press this button to turn EON mode on and off.
The mode changes as follows each time the button pressed.

Cassette deck operation buttons

● REC / REC MUTE button
To start recording from the stop mode, press this button, then press ◀▶.
When this button is pressed during the recording, a blank section of approximately 5 seconds is created, after which the recording standby mode is set.

◀◀ (rewind) button
Press this button to rewind the top side of the tape. (The bottom side of the tape is fast–forwarded.) Also use this button to search for the beginning of the current selection when playing in the forward (▶) direction, or to search for the beginning of the following selection when playing in the reverse (◀) direction.

▶▶ (fast–forward) button
Press this button to fast–forward the top side of the tape. (The bottom side of the tape is rewind.) Also use this button to search for the beginning of the following selection when playing in the forward (▶) direction, or to search for the beginning of the current selection when playing in the reverse (◀) direction.



CD auto changer operation buttons

DIRECT button
Press this button for direct search on the CD auto changer.

◀◀ and ▶▶
(manual search) buttons
Press these buttons during playback to move quickly forward or backward.

REPEAT button
Press this button for repeat playback.

RANDOM button
Press this button to play the tracks in random order.

PROGRAM button
Press this button for programmed playback on the CD auto changer.

CANCEL button
Press this button to clear the last track from the program.

EDIT button
Press this button for edited recording on a tape, dividing the tracks onto sides A and B according to the length of the tape.

TIME button

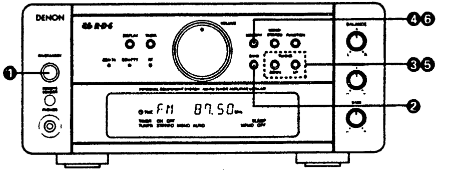
- **TIME**
  Press this button during the play or pause mode to switch the time display.
  Normally the elapsed time for the track currently playing is displayed.
  When this button is pressed, the display switches to the
  remaining time for the track
  ↓
  total elapsed time on the disc
  ↓
  total remaining time on the disc
  ↓
  then back to the elapsed time per track
  During programmed playback, the total remaining time display indicates the total remaining time of the programmed tracks.

7 LISTENING TO RADIO PROGRAMS

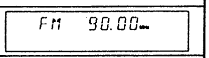
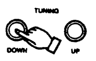
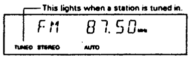
(Check the connections on Pages 5 and 6.)

TUNING

Tuner -Amplifier
(UDRA-M7)


DENON
❶
❷
❸❺
❹❻
FM 87.50

Example: Tuning in FM 87.50 MHz
(AM stations are tuned in using the same procedure.)

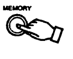
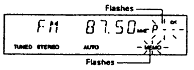
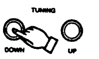
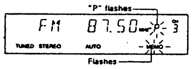
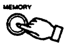
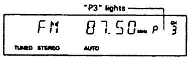
1	Set the VOLUME control on the tuner-amplifier to the minimum position, then press the POWER operation switch to turn on the power.		
2	Press the BAND button on the tuner to select the FM band.		
3	Use the TUNING UP and DOWN buttons to tune the frequency to 87.50. Once the frequency is tuned in, adjust the volume to the desired level using the VOLUME control.	 TUNING DOWN UP	This lights when a station is tuned in.  FM 87.50 TUNED STEREO AUTO

Auto Tuning

- When one of the TUNING buttons is pressed, the frequency changes in steps of 50kHz in the FM band, 9kHz in the AM band.
- If one of the TUNING buttons is held in for over 1 second, the frequency continues to change when the button is released (auto tuning) and stops when a station is tuned in. Tuning will not stop at stations whose reception is poor.
- To stop the auto tuning function, press the UP or DOWN button once.

Presetting AM and FM Stations

Example: Presetting FM 87.50 (currently tuned in) at preset number 3

4	Press the MEMORY button. The MEMO indicator flashes for 10 seconds.		 Flashes FM 87.50 P TUNED STEREO AUTO MEMO Flashes
5	Use the UP and DOWN buttons to call out the number at which you want to preset the station (3), or simply press the corresponding number button ③ on the remote control unit.	 TUNING DOWN UP	 "P" flashes FM 87.50 P 3 TUNED STEREO AUTO MEMO Flashes
6	Press the MEMORY button while the MEMO indicator is flashing.		 "P3" lights FM 87.50 P 3 TUNED STEREO AUTO
Up to 40 AM or FM stations can be preset using this procedure.			

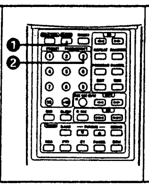
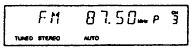
NOTES:

- In addition to the reception frequency, the reception mode (monaural or auto) is also preset, so check the display when presetting stations.
- If a station is preset at a number where a station is already preset, the previous station is replaced with the new station.
- The preset memory is not cleared when the power cord is unplugged.

Listening to Preset Stations

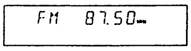
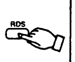
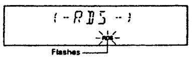
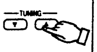
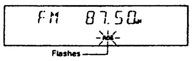
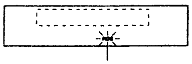
The preset stations can be recalled using the number buttons on the remote control unit.
Also, if the following operation is performed when the system power is off, the power automatically turns on and the radio is played. (Auto on function)

Example: Listening to the station preset at number 3
(This operation is only possible from the remote control unit.)

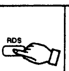
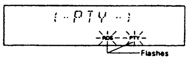
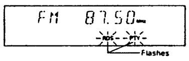
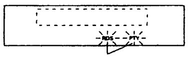
1	Press the TUNER button on the remote control unit.		 FM 87.50 P 3 TUNED STEREO AUTO
2	Press button "3" on the remote control unit.		

Using the RDS functions

Receiving RDS broadcasts (FM only)

1	Press the BAND button and set the FM band.		
2	Press the RDS button once.		 ←RDS→ RDS Flashes "RDS" flashes
3	Press the AUTO TUNING UP (▲) or DOWN (▼) button.		 FM 87.50 RDS Flashes "RDS" displayed
4	The station is tuned in.		 "RDS" lights after 5 seconds of flashing. Once the station is tuned in, "RDS" flashes for 5 seconds and the program service name is displayed.
NOTE: If no RDS station is found, "NO PROG" is displayed.			

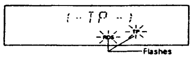
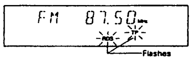
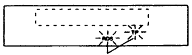
PTY Search

1	Press the RDS button twice.		 ←PTY→ RDS PTY Flashes ("PTY" and "RDS" flash, and "←PTY→" displayed.)
2	Press the PTY button to select the type of program. (One of the 15 types listed below can be selected.)		NEWS RDS PTY Flashes
3	Press the AUTO TUNING UP (▲) or DOWN (▼) button.		 FM 87.50 RDS PTY Flashes
4	The station is tuned in.		 "PTY" and "RDS" light after 5 seconds of flashing. Once the station is tuned in, "RDS" and "PTY" flash for 5 seconds and the program service name is displayed.
NOTE: If no program of the specified type is found, "NO PROG" is displayed.			

Programs

NEWS	(News)
AFFAIR S	(Current Affairs)
INFO	(Information)
SPOR T	(Sport)
EDUCAT E	(Education)
DRAM A	(Drama)
CULTUR E	(Culture)
SCIENC E	(Science)
VARIE D	(Varied)
POP M	(Pop Music)
ROCK M	(Rock Music)
MOR M	(M.O.R. Music)
LIGHT M	(Light Classics)
CLASSICS	(Serious Classics)
OTHER M	(Other Music)

TP Search

1	Press the RDS button 3 times.		 ←TP→ RDS TP Flashes
2	Press the UP (▲) or DOWN (▼) button of AUTO TUNING.		 FM 87.50 RDS TP Flashes
3	The station is tuned in.		 "TP" and "RDS" lights Once the station is tuned in, "TP" and "RDS" light and the program service name is displayed.
NOTE: "NO PROG" is displayed when there is no traffic information broadcast station.			

Receiving FM programs in stereo

- Press the MONO/STEREO selector button to turn on the "AUTO" indicator. When a program being broadcast in stereo is received, the "STEREO" indicator lights and the program is received in stereo.
- If reception is poor and there is much noise in the stereo signals, press the MONO/STEREO selector button to set the monaural mode.

NOTE:

- A humming sound may be heard when using a TV nearby while receiving AM programs. If this happens, move the system as far from the TV as possible.

Radio Text (RDS stations only)

1	When a radio station offering an RT service is tuned in, the RT indicator lights to indicate that the RT service can be received.		RT (Green)	FM 87.50 MHz RDS
2	To turn the RT mode on, press the PANEL button on the remote control unit until the RT indicator is lit in red. (Refer to page 9)	PANEL	RT (Red)	WDR 3 RDS
3	When the station currently tuned in is offering a radio text message service the message scrolls on the display.		RT (Green) The RT indicator blinks in green.	RADIO RDS

- When the RT mode is turned on while an RDS radio station not offering an RT service is tuned in, "NO TEXT" flashes on the display, then the mode automatically switches to the PS mode.
- In the same way, the mode automatically switches to the PS mode when the RT service is finished. In this case, the mode automatically switches from the PS mode back to the RT mode when an RT broadcast is resumed.
- The RT mode cannot be set in the AM band or for FM stations not offering RDS broadcasts.
- To turn the RT mode off, press the PANEL button and switch to the desired display mode.

EON–TA (RDS stations only)

When an RDS station is broadcasting RDS information on other stations within the same network and a traffic announcement begins on another station in the same network based on this information (EON = Enhanced Other Network), that network station is automatically tuned in. The previous station is tuned back in once the traffic announcement is over.

1	When EON–TA function is not on while receiving EON–TA information the EON–TA indicator lights in green.		EON-TA (Green)	WDR 3 RDS (STATION A)
2	Press the EON button once, then the TA indicator turns on in Red. (Refer to page 9)	EON	EON-TA (Red)	TA RDS (STATION A)
3	When a traffic announcement starts, that station is automatically tuned in. The EON–TA indicator blinks in green.		EON-TA (Green)	WDR 2 RDS (STATION B)
4	When a traffic announcement is over, the previous station is tuned in. The EON–TA indicator stops blinking and remains lit in green. The EON–TA function turns off		EON-TA (Green)	WDR 3 RDS (STATION A)

- The EON–TA function cannot be turned on if the station currently tuned in is not an RDS station. If you attempt to do so, "NO RDS" flashes on the display.
- If the RDS station currently tuned in does not provide an EON service, the EON–TA function does turn on, but "NO EON" flashes on the display.
- To turn the EON–TA mode off, press the EON button until the EON–TA indicator turns off or lights in green, following the instructions on page 9. If the EON–TA mode is turned off under the conditions in 3 on the table above, Station B continues to be tuned in.
- If the tuning button, preset button, band button, system power button or function button is pressed when this mode is set, the mode is turned off.
- "NO TP" appears on the display if no traffic announcement is being broadcast on the network of the station which is currently tuned in.

EON–PTY (RDS stations only)

When an RDS station is broadcasting RDS information on other stations within the same network and a programme of the specified programme type (PTY) begins on a station in the same network, that network station is automatically tuned in. Use this function to tune in broadcasts of the desired programme type with priority.

1	When EON–PTY function is not on while receiving EON–PTY information, the EON–PTY indicator lights in green.		EON-PTY (Green)	WDR 3 RDS (STATION A)
2	Press the EON button twice, then the EON–PTY indicator turns on in RED. (Refer to page 9)	EON	EON-PTY (Red)	PTY RDS (STATION A)
3	The programme type flashes for approximately 5 seconds. During this time, press the PTY button to select the type of program. (Refer to page 11.)	PTY	EON-PTY (Red)	NEWS RDS PTY (STATION A)
4	Once the desired programme type is selected, set it with the MEMORY button.		EON-PTY (Red)	POP M RDS (STATION A) (The set programme type lights, and its display turns back on after several seconds. The programme type is set automatically if the MEMO button is not pressed within 5 seconds.)
5	When a programme of the specified programme type begins on a station in the same network, that station is tuned in. The EON–PTY indicator blinks in green.		EON-PTY (Green)	WDR 2 RDS (STATION B)
6	The previous station is tuned back in once a programme of a different programme type begins. The EON–PTY indicator stops blinking, remaining lit in green. The EON–PTY function also turns off.		EON-PTY (Green)	WDR 3 RDS (STATION A)

- The EON–PTY function cannot be turned on if the station currently tuned in is not an RDS station. If you attempt to do so, "NO RDS" flashes on the display.
- If the RDS station currently tuned in does not provide an EON service, the EON–PTY function does turn on, but "NO EON" flashes on the display.
- To turn the EON–PTY mode off, press the EON button until the EON–PTY indicator turns off or lights in green, following the instructions on page 9. If the EON–PTY mode is turned off under the conditions in 5 on the table above, Station B continues to be tuned in.
- If the tuning button, preset button, band button, system power button or function button is pressed when this mode is set, the mode is turned off.
- When using the EON–TA function together with the EO– PTY function, press the EON button once after making the settings on the above table. (Refer to page 9.)
- To reset the PTY after setting it, repeat the procedure from step 2.

NOTE:

1. Be sure to turn the EON–TA and EON–PTY modes off when recording programmes.
2. In the EON–TA and EON–PTY modes, if the station is switched from the current station to another station in the network but the signals of that network station are weak and it cannot be tuned in properly, "WEAK" is displayed and the original station is immediately tuned back in.
3. In the EON–TA mode, the station does not switch to another station in the network if the current station is broadcasting a traffic announcement.
4. In the EON–PTY mode, the station does not switch to another station in the network if the current station is broadcasting a programme of the same programme type.
5. Since the RDS services offered differ from station to station, some RDS functions may not operate for some stations, but this is not a malfunction.

8 USING THE TIMER

The time and timer functions are incorporated in the tuner–amplifier

Timer Settings

■Types of timer operations

TIMER	:	Use this to turn the power on and off at the same times every day.
SLEEP TIMER	:	Use this to set the power to turn off after 10 to 60 minutes, in steps of 10 minutes (operated from the remote control unit).

■Notes on timer settings

- Be sure to set the current time beforehand.
- To listen to or record a radio program ("air check") using the timer, be sure to preset the station beforehand. (Refer to "Presetting AM and FM Stations" on Page 11.)

Power Failures

Should there be a power failure or should the power cord be unplugged, the time display will flash. If this happens, reset the current time.
Also check the timer and tuner presettings, and reset them if they have been cleared.

Checking the Settings

To check the timer settings, press the TIMER button for at least 4 seconds. (This can also be done when the tuner's power is off.) Next, press the MEMORY button repeatedly to display the timer start mode, the reception band and preset channel number when in the tuner mode, the on time and the off time. Press the MEMORY button once more to return to the current mode display.

Changing the Settings

Repeat the timer setting operation to erase the previous settings and set the new settings.

Clearing the Settings

Press the TIMER button for at least 4 seconds, then press it for at least 4 seconds again while "FUNC" is displayed to clear the timer settings.

Note on Setting the Timer

If the time set with the timer is reached while the system power is on, the operation switches to the operation set by the timer.

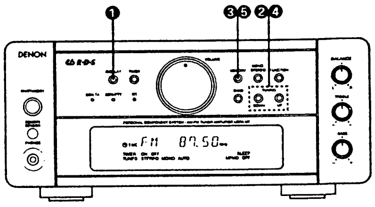
Turning the Timer Off

Press the TIMER button to turn the ◷ mark off.

Setting the Current Time

The time is displayed in the 24–hour mode.

Tuner–amplifier (UDRA–M7)



Example: Setting to 19:30 (7:30 p.m.)

1	Press the DISPLAY button for at least 4 seconds.	DISPLAY	0:00 The hours place flashes. (If the hours have already been set, that number flashes.)
2	Use the UP and DOWN buttons to set the hours.	TUNING DOWN UP	19:00 The hours place flashes.
3	Press the MEMORY button.	MEMORY	19:00 The minutes place flashes (If the minutes have already been set, that number flashes.)
4	Use the UP and DOWN buttons to set the minutes.	TUNING DOWN UP	19:30 The minutes place flashes
5	Press the MEMORY button at the sound of a time service's chime. The time display stops flashing and the clock starts running.	MEMORY	19:30 The display stops flashing and the clock starts running from 00 seconds

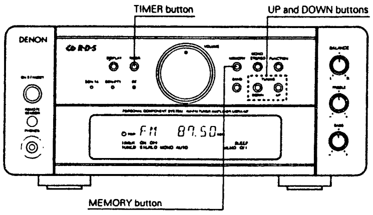
- The current time can be set even when the power is off.
- If an RDS station offers a time service, the time can be set by pressing the CT button on the remote control unit while that station is tuned in.

GENERAL SECTION

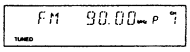
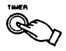
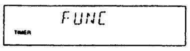
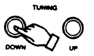
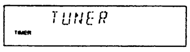
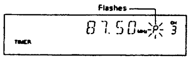
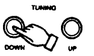
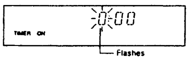
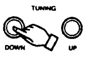
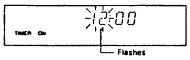
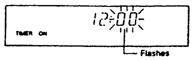
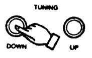
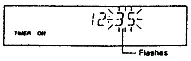
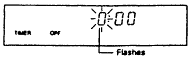
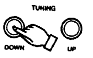
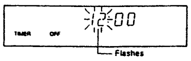
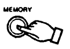
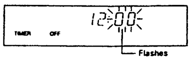
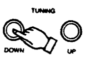
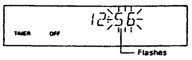
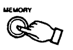
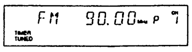
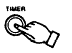
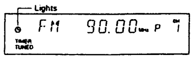
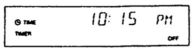
Setting the Timer

The power can be set to turn on and off every day at the same time in any of five modes: tuner, CD, cassette deck (optional), MD player (optional) and air check (recording from the radio). (Preset the AM or FM station beforehand.)

Tuner–amplifier (UDRA–M7)


TIMER button
UP and DOWN buttons
MEMORY button
DENON
FM 87.50

Example: Setting the tuner to turn on at 12:35, off at 12:56 (with FM 87.50 MHz preset at channel "3")

1	Press the POWER operation switch on the tuner–amplifier to turn on the system's power.		 FM 90.00 MHz P CH 1 TUNED Say that FM 90.00 MHz is tuned in at preset channel number "1".
2	Press the TIMER button for at least 4 seconds to set the timer setting mode.		
3	Use the UP and DOWN buttons to set the "TUNER" mode.	 TUNING DOWN UP	 TUNER TIMER
4	Press the MEMORY button.		 Flashes 87.50 MHz P CH 3 TIMER
5	Use the UP and DOWN buttons to set the preset channel number.	 TUNING DOWN UP	
6	Press the MEMORY button.		 0:00 TIMER ON Flashes (If the timer has already been set, that number flashes.)
7	Use the UP and DOWN buttons to set the hours for the timer on time.	 TUNING DOWN UP	 12:00 TIMER ON Flashes
8	Press the MEMORY button.		 12:00 TIMER ON Flashes (If the timer has already been set, that number flashes.)
9	Use the UP and DOWN buttons to set the minutes for the timer on time.	 TUNING DOWN UP	 12:35 TIMER ON Flashes
10	Press the MEMORY button.		 0:00 TIMER OFF Flashes
11	Use the UP and DOWN buttons to set the hours for the timer off time.	 TUNING DOWN UP	 12:00 TIMER OFF Flashes
12	Press the MEMORY button.		 12:00 TIMER OFF Flashes (If the timer has already been set, that number flashes.)
13	Use the UPand DOWN buttons to set the minutes for the timer off time.	 TUNING DOWN UP	 12:56 TIMER OFF Flashes (If the timer has already been set, that number flashes.)
14	Press the MEMORY button.		 FM 90.00 MHz P CH 1 TIMER TUNED The display returns to as it was before the timer setting mode was set.
15	Press the TIMER button.		 Lights FM 90.00 MHz P CH 1 TIMER TUNED
16	Press the POWER operation switch on the tuner–amplifier to turn off the system's power.		 10:15 PM TIME TIMER OFF

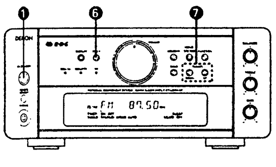
If the ◷ mark is displayed after the TIMER button is pressed, the timer will operate at the same times every day. To turn the timer off, press the TIMER button again to turn the ◷ mark off.

NOTE:

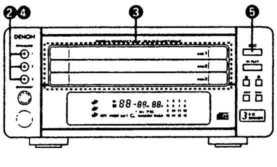
- The standby mark (" ◷ ") will not light if the current time is not set. If this is the case, set the current time, then press the TIMER button.
- Be sure to set the power to the standby mode when using the timer.

Various Timer Operations

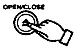
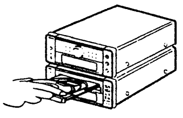
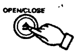
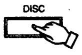
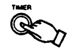
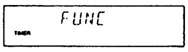
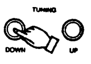
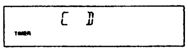
Tuner–amplifier (UDRA–M7)



CD auto changer (UDCM–M7)



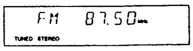
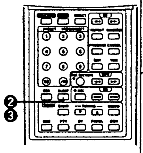
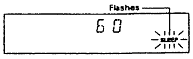
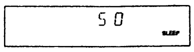
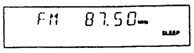
Example 1: Playing a compact disc with the timer

1	Press the POWER operation switch on the tuner–amplifier to turn on the system's power.		
2	Press the CD auto changer's ▲ OPEN/CLOSE button to open the disc tray.		
3	Load the disc in the disc tray. Refer to Page 16.		
4	Press the CD autjo changer's ▲ OPEN/ CLOSE button again to close the disc tray.		
5	Press the DISC button to select the disc to be played.		
6	Press the tuner–amplifier's TIMER button for at least 4 seconds.		
7	Use the tuner–amplifier's UP and DOWN buttons to set the "CD" mode.	 TUNING DOWN UP	
8	Now follow steps 6 to 16 under "Setting the Timer" on Page 13.		

Setting the Sleep Timer

With this function, the power can be set to turn off after 10 to 60 minutes, in steps of 10 minutes, using the remote control unit.

Example: To turn the power off after 50 minutes when listening to FM 87.5 MHz
(This operation is only possible from the remote control unit.)

1	Tuner currently set to FM 87.50 MHz		 FM 87.50 MHz TUNED STEREO
2	Press the SLEEP button.		 Flashes 60 SLEEP
3	Press the SLEEP button again while the "SLEEP" indicator is flashing.		
4	The previous display reappears after 5 seconds. The "SLEEP" indicator remains lit, indicating that the sleep timer is functioning.		 FM 87.50 MHz SLEEP

- The time is reset to "60" (60 minutes) if the SLEEP button is pressed again while the sleep timer is functioning.

Cancelling the Sleep Timer

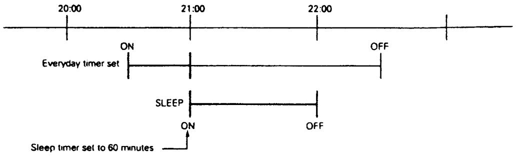
Press the SLEEP button repeatedly until the "SLEEP" indicator turns off.
The sleep timer is also cancelled if the tuner–amplifier's Power operation switch (ON/STANDBY) or the POWER switch on the remote control unit is pressed, turning the system power off.

NOTE:

- If the times set with the sleep and everyday timers overlap, the sleep timer has priority.

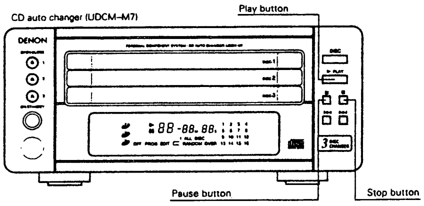
Order of priority of the sleep and everyday timers

The sleep timer has priority for the off time. (The system operates as indicated by the bold lines.)

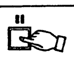


Even when the power was turned on with the timer, the power turns off if the remaining time of the sleep timer reaches " 00 " before the off time set with the everyday timer is reached. If the everyday timer's on time is reached while the sleep timer is functioning, the everyday timer does not function.

CD auto changer (UDCM-M7)



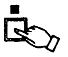
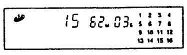
Interrupting playback temporarily

Press the ⏸ (pause) button.		The " ⏸ " mark appears on the display, and playback stops at the point where the button was pressed.

Resuming playback

Press the ▶ PLAY button. R		The " ⏸ " mark turns off on the display, and playback resumes from the point where the pause button was pressed.

Stopping playback

Press the ■ (stop) button. R		

NOTES:

- When a disc is loaded, " 00.00. " is displayed on the display for several seconds while the data on the number of tracks and total playing time is being read from the inner-most side of the disc, after which the number of tracks and total playing time appear
- If no disc is loaded, if the disc is upside down, or if the data cannot be read properly due to scratches or dirt, the display reads as shown below and the disc will not play.

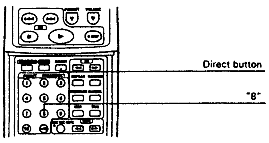
00 00M 00S

Various Playback Functions

In addition the regular playback, the D-M7 also offers the following playback functions:

❶ Playing a specific track .... **Direct Search**

(Using the remote control unit)
Example: Playing the 8th track

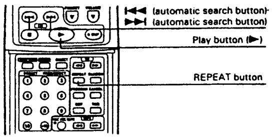


① Press the DIRECT button.
② Press the button corresponding to the number of the track 8. "8" appears on the track number display and playback of track number 8 begins.

- When the end of the track is reached, playback continues on the next track.
- To specify a track number of 11 or greater, say track 15, press +10 then 5, and to specify a track number of 20 or greater, say track 23, press +10, +10 then 3.
  To play track 20, press +10 then 10.

❷ Playing a single track repeatedly .... **Single-track Repeat**

(Using the remote control unit)

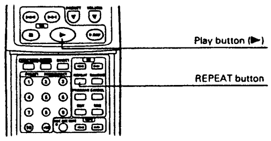


① When the REPEAT button is pressed once, " ⊏ " " 1 " appears on the display and the single-track repeat mode is set.
② Use the ⏮ and ⏭ buttons to select the track to be repeated.
③ Press the play button (▶) to start playback.

- When the end of the specified track is reached, playback starts over from the beginning of that track.
- The single-track repeat mode can also be set by pressing the REPEAT button once during playback.
- To cancel the single-track repeat mode, press the REPEAT button repeatedly until the "REPEAT" indicator turns off.

❸ Playing all the tracks repeatedly .... **All-track Repeat**

(Using the remote control unit)

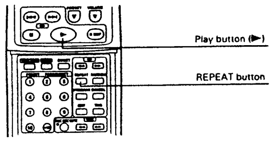


① When the REPEAT button is pressed twice, " ⊏ " "DISC" appears on the display and the all-track repeat mode is set.
② Press the play button (▶) to start playback.

- The all-track repeat mode can also be set by pressing the REPEAT button twice during playback.
- To cancel the all-track repeat mode, press the REPEAT button to turn the " ⊏ " indicator off.
- If the REPEAT button is pressed during programmed playback, the tracks are played repeatedly in the programmed order.

❹ Playing all the disc repeatedly .... **All-disc Repeat**

(Using the remote control unit)



① When the REPEAT button is pressed, " ⊏ " "ALL DISC" appears on the display and the all-disc repeat mode is set.
② Press the play button (▶) to start playback.

- The all-disc repeat mode can also be set by pressing the REPEAT button 3 times during playback.
- To cancel the all-disc repeat mode, press the REPEAT button to turn the " ⊏ " indicator off.
- If the REPEAT button is pressed during programmed playback, the tracks are played repeatedly in the programmed order.

9 PLAYING CDs

About Compact Discs

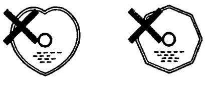
COMPACT
disc
DIGITAL AUDIO

Only discs with the mark shown left can be played on the D-M7.

Use compact discs that include the disc mark.

CD's with special shapes (heart-shaped CDs, octagonal CDs etc.) cannot be played on this set.
Attempting to do so may damage the set. Do not use such CDs.

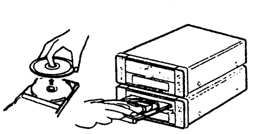
Disc	Remarks
CD	
CDV	Only the audio part is played.
CD singles (8cm discs)	



- For CDVs, only the audio part is played. (The video part is not played.)

■Removing discs from their cases
As shown on the diagram, grasp the outer edge of the disc with your fingers, insert a finger in the center hole, press gently, then lift the disc out of the case.

■Loading discs in the disc tray



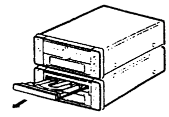
Be sure to load the disc with the labelled side facing up. (Compact discs only play on one side.) For 8cm CDs, set the disc in the sunken section in the center of the tray.

NOTES:

- The disc tray opens when the ⏏ OPEN/CLOSE button is pressed once and closes when it is pressed again
- When the disc tray is closed, the disc turns automatically for several seconds, then the total number of tracks and total playing time of that disc appear on the display.
- The disc tray can also be closed by pressing the ▶ PLAY button, in which case playback automatically starts from the first track on the disc (or if tracks are programmed, from the first programmed track).

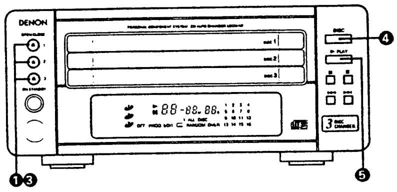
Handling the Disc Tray

Do not turn off the power, stop the disc tray by hand or pull on it when it is moving. Doing so may damage it.
If the headphones' cord or some other object accidentally gets caught in the disc tray while it is closing and the disc tray stops, press the ⏏ OPEN/CLOSE button again to open the tray and remove the obstacle.
Do not set objects other than discs on the disc tray. Doing so may damage it.



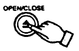
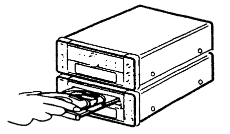
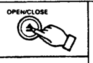
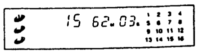
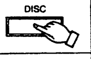
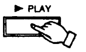
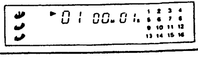
Normal Playback

CD auto changer (UDCM-M7)



Example: Playing a disc containing 15 tracks and with a playing time of 62 minutes, 03 seconds, starting from the first track

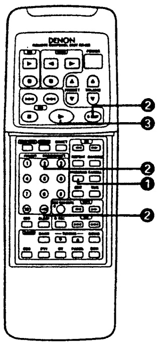
The R mark indicates operations which can also be performed on the remote control unit.

1	Press the ⏏ OPEN/CLOSE button of the disc tray you want to open the disc tray.		OP EN
2	Load the CD in the disc tray.		
3	Press the ⏏ OPEN/CLOSE button. The disc tray closes. The display appears after several seconds.		
4	Press the DISC button to select the disc to be played.		
5	Press the ▶ PLAY button R		

❶ Playing the tracks in a certain order .... Programmed Playback

(Using the remote control unit)

Procedure

1	Press the PROGRAM button.		-- P- 01 PROG
2	Press the D. SKIP. number and +10 buttons to select the disc to be programmed. • For example, to program the 3rd track on the 2nd disc and the 12 track on the 3rd disc, press D. SKIP (2 flashes), 3, D. SKIP (3 flashes), +10, and 2.		Flashes 03 P- 01 3 PROG display when the 3rd track is set at the first place Flashes 12 P- 02 12 PROG display when the 12th track is set at the second place
3	Press the play button (▶).		The tracks are played in the programmed order.

- When the TIME button is pressed before playback, the total playback time of programmed tracks is displayed.
- Press the DIRECT button to resume normal playback during the programmed playback.
- To cancel the entire program, press the DIRECT button or cancel the program one by one using the CANCEL button.
- If you program the wrong track, press the CANCEL button then program the right track. (The last track in the program is erased each time the CANCEL button is pressed.)

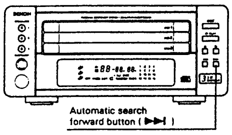
Other operations possible during programmed playback:
Such operations as quick search, pause and skip monitor are also possible during programmed playback.
For the quick search function, press the automatic/manual search reverse button (⏮) to move back to the beginning of the track, then press it again while the time display reads " 00:00 " to move back to the beginning of the preceding track.
To move ahead to the beginning of the next track, press the automatic/manual search forward button (⏭), regardless of the time display.

NOTES:

- The numbers of the programmed tracks on the music calendar turn off after the tracks have been played.
- With this CD player, up to 16 tracks with any track number between 1 and 99 can be programmed.
- If a number greater than the total number of tracks on the disc is specified, that number will not be displayed.
- Programming is also possible with the disc tray open. In this case it is possible to program a track number not included on the disc, but when the program is played, that track number will be skipped.
- The entire program is cancelled when the OPEN/CLOSE button is pressed.
- If you make a mistake when programming, press the CANCEL button to cancel the mistake. (The last track in the program is cancelled each time the CANCEL button is pressed.)
- Set the stop mode when cancelling tracks from the program.

❹ Moving ahead to the next track during playback .... Quick Search

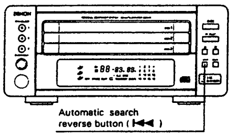
CD auto changer (UDCM-M7)



Press the automatic search forward button (⏭).

❺ Moving back to the beginning of the track during playback .... Quick Search

CD auto changer (UDCM-M7)



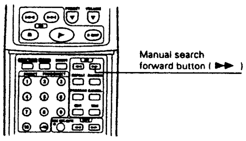
Press the automatic search reverse button (⏮).

❻ Finding a certain spot on the disc while listening to the sound .... Skip Monitor

- Use this function to skip through the disc while listening to the sound.
- When the desired spot is reached using the skip monitor function, release the manual search forward button (⏩) or manual search reverse button (⏪) to resume normal playback from that point.

(1) Forward skip monitor

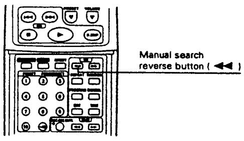
(Using the remote control unit)



During playback, press and hold in the manual search forward button (⏩) to skip through the disc in the forward direction while listening to the sound.

- The track currently being monitored and the elapsed time for that track are indicated on the display.
- If the manual search forward button is held in until the end of the disc is reached, the next disc is selected.
  If the manual search forward button is held in until the end of disc 3 is reached, the stop mode is set.

(2) Reverse skip monitor



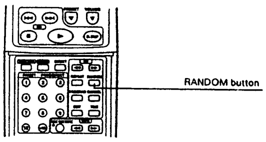
- The track currently being monitored and the elapsed time for that track are indicated on the display.
- If the manual search reverse button (⏪) is pressed continuously, it will reach the beginning of the first track on the disc. Release the manual search reverse button (⏪) to resume normal playback.

During playback, press and hold in the manual search reverse button (⏪) to skip through the disc in the reverse direction while listening to the sound.

❼ Playing the tracks in random order .... Random Playback

(Using the remote control unit)

- Use this function to play all the tracks on the disc once in random order.



- Press the RANDOM button to turn on the "RANDOM" indicator, then press the play button to start random playback in the programmed playback mode.
- In the normal playback mode, simply press the RANDOM button to start random playback.

- The programmed tracks can be played in random order by pressing the RANDOM button when tracks are programmed.
- If the RANDOM button is pressed while the repeat mode is set, the tracks are each played once in random order, then played again in another order, and so on.
- Random playback cannot be set in the A-B repeat mode.
- While the next track is being searched for, any numbers of the tracks on the disc are not displayed on the track number display so it is not possible to know which track will be played next.
- The repeat mode is set to the all-track repeat mode when the RANDOM button is pressed during the single-track repeat mode.

NOTES:

- The total remaining time cannot be displayed during the random playback mode.
- The random playback mode cannot be set during editing.

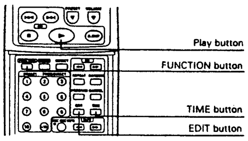
Edited Recording on Sides A and B of a Tape

This function allows edited recording according to the size of the tape. (This operation is only possible from the remote control unit.)
Edited recording is a system function of the D-M7 series. This function can only be used in combination with the DRR-M7.

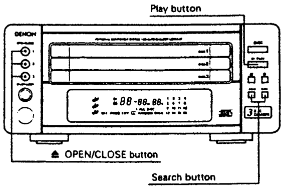
- Use this function to efficiently edit the tracks on a CD according to the length (time) of the tape onto which you want to record.

NOTES:

- In the edited recording mode, it is programmed so that the remaining time of the tape becomes minimum and the last programmed track may be out of line on both side. If you want to make serial track recording in this case, use the CD SRS button after stopping the edited recording mode.
- Load the cassette tape onto which you want to record in the cassette deck with side A on the top before starting the editing procedure. The tape is automatically wound to the beginning before recording starts.
- The editing mode is cancelled when the CD auto changer's stop button is pressed.
- Note that even if the tape is slightly longer than the disc's total playing time, it may not be possible to record all the tracks on sides A and B because of the combination of tracks to be recorded on the different sides of the tape.
- When recording on an already recorded tape, if the tape is longer than the new recording, the previous recording will remain at the end of side B, so erase the tape before starting.
- To protect the recording, do not press the FUNCTION (input selector) button during edited recording.
- During edited recording, only the stop button, POWER switch, and TIME button for the CD auto changer and the RESET button, stop button, DOLBY NR button, and POWER switch for the cassette deck will function.
- Blank sections of 5 seconds are automatically created between all the selections to make it easier to search for selections on tapes recorded on this system. Since this differs from the actual time between tracks on the CD, the displayed time and the actual remaining time on the tape differ slightly.
- Set the reverse mode on the cassette deck (DRR-M7) to ⮌ or ⟲ during edited recording.
- The total remaining time cannot be displayed during the programmed edited recording.
- When using the editing function with discs containing more than 21 tracks, only 20 tracks can be edited.

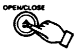
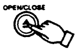


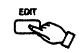
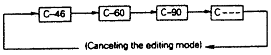
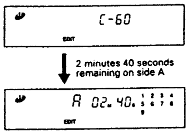
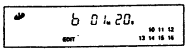
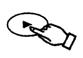
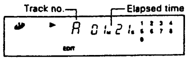
CD auto changer (UDCM-M7)



❶ Recording the tracks in the same order as on the disc .... Automatic Edited Recording

Example: Recording a disc containing 16 tracks and a total playing time of 56 minutes on a C-60 cassette tape

1	Press the CD auto changer's ⏏ OPEN/CLOSE button to open the disc tray. Load the disc in the disc tray.	 OPEN/CLOSE	OP EN
2	Press the ⏏ OPEN/CLOSE button to close the disc tray. The display appears after several seconds.	 OPEN/CLOSE	16 56.00. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

3	Press the FUNCTION button on the tuner–amplifier to set the CD mode.		
4	Press the EDIT button on the remote control unit to set the length of the tape. (The length is the total for sides A and B.) For a 60–minute (C–60) tape, press the EDIT button 2 times.		Load the cassette tape onto which you want to record in the cassette deck with side A facing up.
	The display changes as shown below each time the EDIT button is pressed. (If the tape length has already been set once, the display changes starting from that length.)  C–46 C–60 C–90 C––– (Canceling the editing mode) Inputting other tape sizes: To input other tape sizes, use the number buttons when "C–––" is displayed.		Example: For a 60–minute tape  C-60 EDIT 2 minutes 40 seconds remaining on side A A 02.40. 1 2 3 4 5 6 7 8 9 EDIT Side A display – Tracks 1 to 9 will be recorded on side A.
5	After this, the remaining times for sides A and B are displayed alternately for several seconds each.		1 minute, 20 seconds remaining on side B  Side B display
6	Press the play button on the remote control unit or the CD auto changer.		 Track no. Elapsed time A 01.21. 1 2 3 4 5 6 7 8 9 EDIT
7	The tape is automatically wound to the beginning on the cassette deck, then recording starts.		

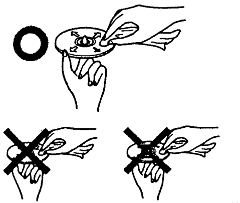
- To set a time other than 46, 60 or 90, input the time when "C–––" is displayed. The time can be set to up to 99 minutes. The time is input in the same way as when inputting track numbers for the CD direct search operation.

10 AUTO ON FUNCTION

- When the play button or OPEN/CLOSE button on the CD auto changer, cassette deck (optinal) or MD recorder (optional) is pressed while the power is set to the standby mode, the power automatically turns on and the play or open/close operation is performed.
- In the same way, when the tuner preset up/down buttons on the remote control unit is pressed, the power turns on and the corresponding station is tuned in.

11 OTHER INFORMATION

Cleaning Discs



Dust, fingerprints or spit on the disc will result in noise or skipping. If the disc is dirty or if the CD auto changer does not operate properly, use the following procedure to clean the disc:

- Hold the disc with the signal surface (the side opposite the labelled side) facing up, as shown in the diagram.
- Wipe the disc gently from the center towards the edge (in the direction of the arrow) with a soft cloth.

Do not clean discs with the following:

- Benzene, alcohol or other solvents
- Cleaner including an abrasive
- Sprays or cleaners designed for records
- Anti–static

NOTES

- Do not wipe discs in the direction opposite the arrow or in a circular motion as with regular records.
- The disc's signal surface is easily damaged, so do not wipe it with a hard cloth or rub it strongly.

12 SPECIFICATIONS

■Tuner–amplifier (UDRA–M7)	
Reception frequency band:	FM: 87.50 MHz – 108.00 MHz AM: 522 kHz – 1611 kHz
Reception sensitivity:	FM: 1.5 µV/75 Ω/ohms AM: 20 µV
FM stereo separation:	35 dB (1 kHz)
Rated output power:	30 W + 30 W (6 Ω / ohms, DIN)
Low frequency adjustment range:	100 Hz ± 8 dB
High frequency adjustment range:	10 kHz ± 8 dB
Audio input / output jacks:	CD input jacks, tape input/output jacks, AUX. input jacks, MD input/output jacks, 3.5 mm headphones jack
Power supply:	AC 230 V, 50 Hz
Power consumption:	65 W
Maximum external dimensions:	210 (W) × 95 (H) × 323 (D) mm (8–17/64" × 3–45 / 64" × 12–7 / 8") (including feet, controls and terminals)
Weight:	3.5 kg (7 lbs. 11 oz)
■CD auto changer (UDCM–M7)	
Wow & flutter:	Below measurable limits (± 0.001% W. peak)
Sampling frequency:	44.1 kHz
Optical source:	Semiconductor
Power supply:	AC 230 V, 50 Hz
Power consumption:	12 W
Maximum external dimensions:	210 (W) × 97 (H) × 343 (D) mm (8–17/64" × 3–45 / 64" × 13–5 / 16") (including feet, controls and terminals)
Weight:	3.0 kg (6 lbs. 13 oz)
■Remote control unit (RC–828)	
Remote control system:	Infrared pulse
Number of buttons:	47
Power supply:	Two DC 1.5V R6P/AA batteries
Maximum external dimensions:	67 (W) × 197 (H) × 21 (D) mm (2–41/64" × 7–3 / 4" × 53 / 64")
Weight:	145 g (including batteries) (Approx. 4.6 oz)

- Maximum dimensions include controls, jacks, and covers.
  (W) = width, (H) = height, (D) = depth
- For improvement purposes, specifications and functions are subject to change without advanced notice.

13 TROUBLESHOOTING

Check the following once more before assuming there is a problem with the system.

1. Are connections proper?

2. Is the system being operated as explained in the operating instructions?

If the system does not seem to be operating properly, check as shown on the table below. If none of these checks apply to the problem, the system may be malfunctioning. Disconnect the power cord immediately and contact your store of purchase.

	Symptom	Cause	Countermeasure	Page
General	Power does not turn on when power operation switch is pressed.	• Power cord is not plugged into a power outlet.	• Plug the power cord securely into an outlet.	5
	No sound is produced from the speakers.	• VOLUME control is turned down. • Headphones are connected. • Speaker cords are not securely connected.	• Set the control to an appropriate position. • Disconnect the headphones. • Connect securely.	6 6 5
	No treble sound is produced, or the position of the instruments is unclear.	• Speaker polarities (⊕ and ⊖) are inverted.	• Connect the speaker cords properly.	5
	A source other than the desired one is heard.	• Function is not properly set.	• Set the desired function using the FUNCTION button.	6
Tuner	Hissing sound is heard in FM programs.	• Antenna direction is poor. • Signals from the broadcast station are weak.	• Change the direction of the antenna. • Install an outdoor antenna.	4 4
	Hissing sound is heard in AM programs.	• Noise from a TV or interference from a broadcast station.	• Turn the TV off. • Change the direction of the loop antenna. • Install an outdoor antenna.	- - 4
	Humming sound is heard in AM programs.	• Signals on the power cord are being modulated by the power source frequency	• Insert the power cord in the opposite direction. • Install an outdoor antenna.	- 4
CD player	Total number of tracks not displayed when disc is loaded.	• Disc is loaded upside–down. • Disc is dirty. • Disc is not of the specified type.	• Reload the disc. • Clean the disc. • Replace with a disc of the specified type.	16 20 -
	Nothing happens when operating buttons are pressed. Disc stops in the middle of a track and will not play properly.	• Disc is loaded upside–down. • Foreign object on disc tray. • Disc is dirty. • Disc is scratched.	• Reload the disc. • Remove the disc and the foreign object. • Clean the disc. • Replace with an unscratched disc.	16 16 20 -
	Sound is broken.	• Dirt, fingerprints, spittle, etc. on disc. • Disc is scratched. • Player is in an unstable place and vibrates strongly	• Clean the disc. • Replace with an unscratched disc. • Place the player in a stable place with no vibrations.	20 - -
	Humming sound is heard when disc is played.	• Signals on the power cord are being modulated by the power source frequency.	• Insert the power cord in the opposite direction.	-

• Protector circuit

The UDRA–M7 is equipped with a high speed protector circuit.

This circuit protects internal parts from being damaged by strong currents generated in the set should the set be operated when the speaker terminals are incompletely connected or short–circuited.

If this protector circuit is activated, a relay sound is produced, the output to the speakers is interrupted, and the function and power LEDs flash to indicate that there is a problem. If this should happen, unplug the power cord, check the speaker connections, then plug in the power cord and turn the power back on. After several seconds, a relay sound is heard and the set starts operating properly.

- The set may not operate properly due to such external influences as lightning or static electricity. If this happens, either turn off the power with the tuner–amplifier's POWER operation switch or unplug the power cord, wait approximately 5 seconds, then plug the power cord back in.

GENERAL SECTION

OPERATING INSTRUCTORS [For Asia model]

NOTE ON USE / 使用注意事項

- Avoid high temperatures.
  Allow for sufficient heat dispersion when installed on a rack.

防止高溫

- 勿將本機放置於受烈日曝曬或靠近發熱器材的位置。

機架／機箱安裝注意

- 避免將本機裝於密閉的機架內。
- 裝於機架或機箱時，要配備足夠大的通風孔，以加強散熱。

- Handle the power cord carefully.
  Hold the plug when unplugging the cord.

留意電源線

- 從插座拔出插頭時切勿拉電源線，應該抓住插頭將其拔出。

- Keep the set free from moisture, water, and dust.

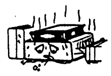
注意濕氣，水和塵

- 勿將本機放置於溫度偏高或多塵的位置。花瓶或其它有水的物件均不宜擺在本機上方。

- Unplug the power cord when not using the set for long periods of time.

當你外出時

- 長時間不用本機時，例如外出旅行時，須將插頭拔離電源插座。

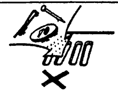


- (For sets with ventilation holes)
- 備有通風孔的機殼

- Do not obstruct the ventilation holes.

勿堵塞機殼的通風孔

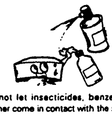
- 堵塞通風孔會損壞本機。
- 各通風孔對本機內部散熱異常重要。必須特別留意，若通風孔有物件阻擋，就會使機內溫度升得很高。



- Do not let foreign objects in the set.

勿讓雜物掉入機內

- 特別要留意勿讓針、髮夾、硬幣等進入本機。



- Do not let insecticides, benzene, and thinner come in contact with the set.

保護機殼

- 避免在本機附近噴灑殺蟲劑，也勿用汽油天拿水或其它溶劑抹機箱，因這類溶液會引起品質或顏色改變。抹擦要用軟布，在用化學處理過的布揩抹時請小心遵守說明書規定。

- Never disassemble or modify the set in any way.

勿打開機殼

- 打開機殼的蓋或底板，及伸手入機殼內部是危險的。切勿打開機殼。如果本機表現有不妥當時，宜立刻拔下電源插頭，再與購入本機的商店或最近經銷商聯絡。

CAUTION/注意事項

- If the system should smoke or produce strange smells, immediately set the power operation switch to tho STANDBY position, unplug the power cord, and contact your store of purchase.
- 本系統如有冒煙或產生異味，應立刻把電源掣撥到STANDBY（候用）位，拔下電源線，再向購入的商號查詢。

SAFETY IMPORTANT/注意安全

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD,DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

警告：
為避免着火或觸電意外，請勿讓設備遭雨淋受潮。

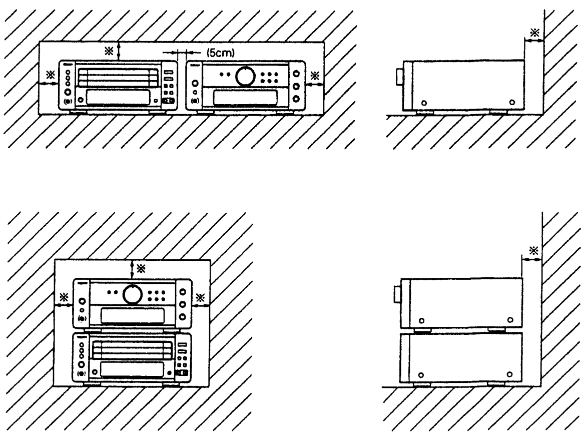
"SERIAL NO./ 編號
PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF THE CABINET FOR FUTURE REFERENCE"
請記下機箱背面附帶的機身編號供日後參考。"

- **INSTALLATION PRECAUTIONS**

For heat dispersal, leave at least 10 cm of space between the top, back and sides of this unit and the wall or other components.

安裝注意事項

為散熱起來，務必在本機頂上，後背和四邊與牆壁之間留有至有10厘米的空隙。



※ 10 cm or more
10厘米以上

※ Wall
牆壁

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.

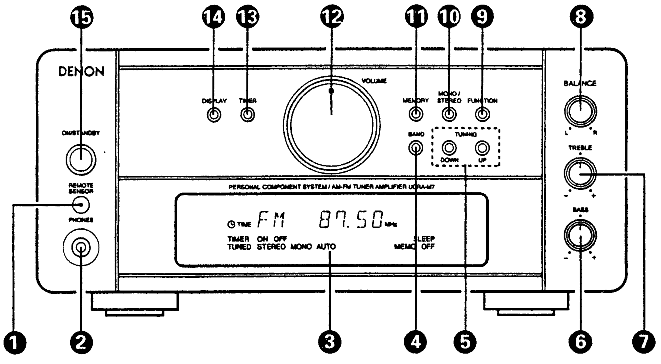
VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VARNING– OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

"CLASS 1
LASER PRODUCT"

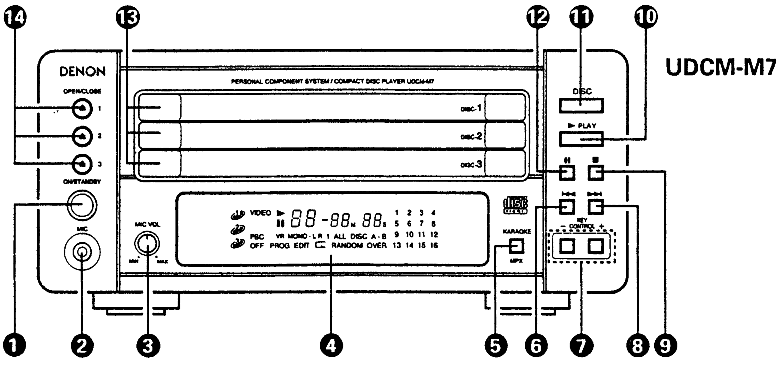
TUNER-AMPLIFIER
調諧-擴音器

See ENGLISH Page 6.
見第24頁


UDRA-M7
⓯
⓮
⓭
⓬
⓫
⓾
❾
❽
DENON
ON/STANDBY
REMOTE SENSOR
PHONES
DISPLAY
TIMER
VOLUME
MEMORY
MONO / STEREO
FUNCTION
BAND
TUNING
DOWN
UP
BALANCE
L
R
TREBLE
BASS
PERSONAL COMPONENT SYSTEM / AM-FM TUNER AMPLIFIER UDRA-M7
TIME FM 87.50 MHz
TIMER ON OFF
TUNED STEREO MONO AUTO
SLEEP
MEMO OFF
❶
❷
❸
❹
❺
❻
❼

CD AUTO CHANGER
光碟自動換碟器

See ENGLISH Page 7.
見第25頁


UDCM-M7
⓮
⓭
⓬
⓫
⓾
DENON
OPEN/CLOSE
1
2
3
ON/STANDBY
MIC
MIC VOL
MIN
MAX
PERSONAL COMPONENT SYSTEM / COMPACT DISC PLAYER UDCM-M7
DISC-1
DISC-2
DISC-3
VIDEO
PBC
OFF
VR MONO · L R 1 ALL DISC A · B
PROG EDIT RANDOM OVER
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
KARAOKE
MPX
DISC
▶ PLAY
KEY CONTROL
❶
❷
❸
❹
❺
❻
❼
❽
❾

- As an aid to better understanding the operation method, the illustrations used in this manual may differ from actual system
- 本說明書內各插圖僅為協助理解操作方法用途，實際系統樣貌或會有差異。

GENERAL SECTION

[For Asia model]

CONTENTS

1 Main Features 4
2 Before Using 4
3 Connecting the Included Antennas 4
4 Connections 5
5 Part Names, Functions and Displays ..... 6 ~ 7
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6 Remote Control Unit 8, 9
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8 Using the Timer ..... 11 ~ 13
9 Playing CDs ..... 14 ~ 20
  - About Compact Discs 14
  - Normal Playback 15
  - Various Playback Functions ..... 16 ~ 18
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  - Playing Video CDs 19
  - Using the Karaoke Functions 20
10 Auto On Function 20
11 Other Information 20
12 Specifications 21
13 Troubleshooting 21

Check that the following parts are included in the package aside from the main unit:

- **UDRA-M7 (Tuner–amplifier unit)**
  - FM antenna 1
  - AM loop antenna 1
  - Remote control unit (RC–831) 1
  - R6P/AA batteries 2
  - Operating instructions 1
- **UDCM-M7 (CD auto changer unit)**
  - System connector cable 1
  - RCA pin–plug cord 2

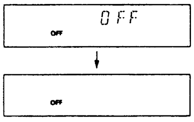
1 MAIN FEATURES

- **Quality power for high quality sound**
  30W + 30W (6 Ω/ohms, DIN) high quality amplifier and terminals for large speakers.
- **High sound quality, multi–function CD auto changer**
  Edit function for automatically dividing the tracks on a CD for recording onto sides A and B of a tape.
- **Two types of timers**
  Two timer settings can be made — everyday and sleep.
- **Easy–to–use remote control unit**
- **Auto on function**
  The power turns on automatically and playback begins when the play button on the CD auto changer or the cassette deck or the tuner–amplifier preset up/down buttons on the remote control unit are pressed.

2 BEFORE USING

Read the following before using the system.

- **Before turning on the power**
  Check again that all connections are correct and that there are no problems with the connection cords. Be sure to unplug the power cord before connecting or disconnecting the connection cords.
- Humming may be produced if this system is set near a TV or other audio equipment. If this happens, try changing the position of the equipment or the connection cords.
- **Moving the system**
  Be sure to remove CDs before moving the system. If a CD is left in the CD auto changer, it may be scratched.
  When shipping, first specify the disc using the disc selector button, press the ON/STANDBY button to turn the off the "OFF" indicator, then unplug the power cord.



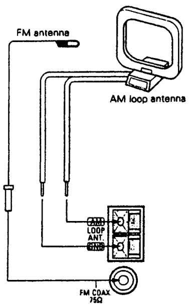
To prevent short–circuits or damage to the connection cords, always unplug the power cord and disconnect all connection cords to other audio equipment

- **Condensation (dew)**
  Condensation (water droplets) may be produced on internal optical lenses or discs in the following cases:
  - Directly after a heater is turned on.
  - When the system is in a steamy or humid room.
  - When the system is moved abruptly from a cold place (room) to a warm room.
- **Should condensation occur:**
  The signals on the disc cannot be read and the system will not function properly. Remove the disc then let the system set with the power on. The condensation will evaporate in one hour or less, at which time the system will function normally.
- Note that some of the illustrations used for explanations in this manual may differ from the actual system.

3 CONNECTING THE INCLUDED ANTENNAS

Installing the FM indoor antenna

Tune in an FM station (see Page 10), set the antenna in a position in which distortion and noise is minimum, then fasten the tip of the antenna in this position using tape or a pin.


FM antenna
AM loop antenna
AM
LOOP
ANT.
GND
FM COAX
75Ω

Connecting an FM outdoor antenna

If good reception cannot be achieved with the included FM antenna, use an FM outdoor antenna. Connect an F–shaped connector to the coaxial cable and connect the antenna to the FM COAX (75 Ω/ohms) terminal.

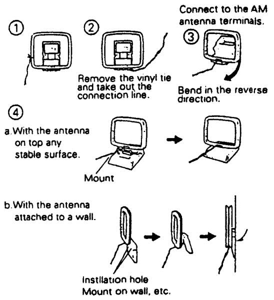
Selecting a place for the FM outdoor antenna

- Set the antenna so that it is pointing towards the broadcast station's transmitting antenna. Behind buildings or mountains, set the antenna in the position at which reception is best, and also try changing the direction of the antenna.
- Do not install the antenna under power lines.
  Doing so is extremely dangerous, as the power line could touch the antenna.
- Install the antenna away from roads or train tracks to avoid noise from cars or trains.
- Do not install the antenna too high, as it may be hit by lightning.

Installing the AM loop antenna

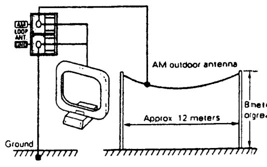
Tune in an AM station (see Page 10) and set the antenna in a position as far from the system as possible in which distortion and noise is minimum. In some cases it is best to invert the polarities. AM broadcasts cannot be received well if the loop antenna is not connected or if it is set close to metal objects.

Assembling the AM loop antenna


Connect to the AM antenna terminals.
①
②
③
Remove the vinyl tie and take out the connection line.
Bend in the reverse direction.
④
a. With the antenna on top any stable surface.
Mount
b. With the antenna attached to a wall.
Instllation hole
Mount on wall, etc.

Installing an AM outdoor antenna

Connect the signal wire from the AM outdoor antenna to the antenna terminal. Be sure to ground the antenna and connect the ground wire to the GND terminal. Also be sure to connect the included AM loop antenna.


AM
LOOP
ANT.
GND
AM outdoor antenna
8meters or greater
Approx 12 meters
Ground

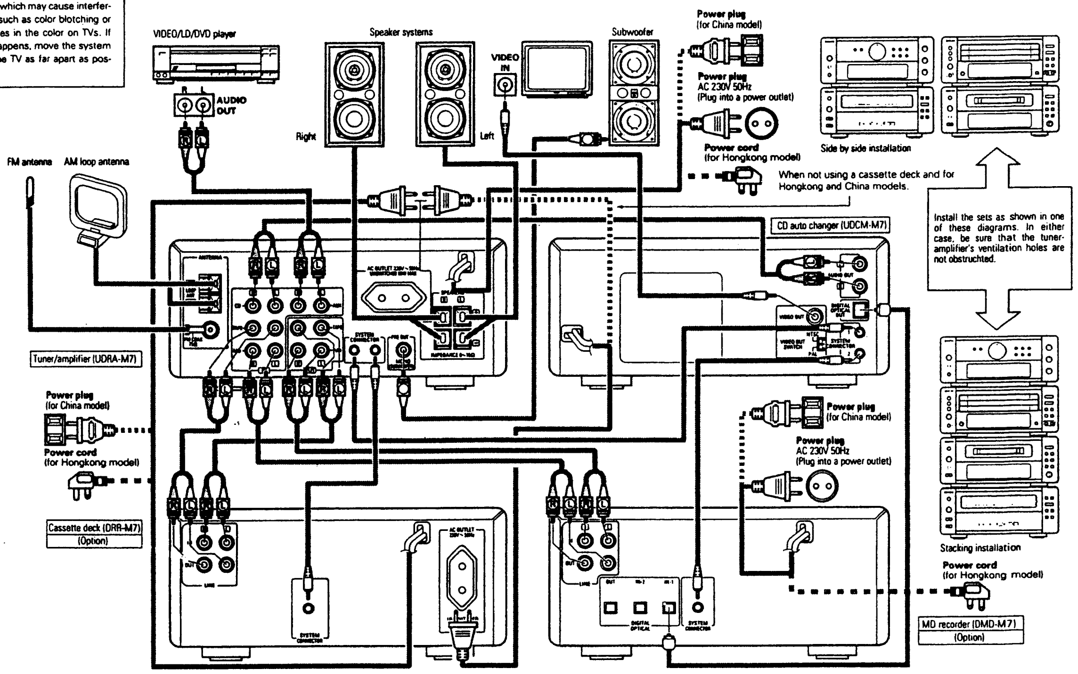
4 CONNECTIONS

NOTE:
This system includes digital circuitry which may cause interference such as color blotching or changes in the color on TVs. If this happens, move the system and the TV as far apart as possible.

Connecting the speaker systems

Connect the speaker system for the left channel (the left side as seen from the front) to the "L" terminals, the speaker system for the right channel to the "R" terminals. Be sure to use speaker systems with an impedance of 6 Ω/ohms or greater.

CAUTION:
Whenever the power switch is in the STANDBY position, the unit is still connected on AC line voltage.
Please be sure to unplug the cord when you leave home for, say, a vacation.


VIDEO/LD/DVD player
R
L
AUDIO OUT
Speaker systems
Right
Left
VIDEO IN
Subwoofer
Power plug (for China model)
Power plug AC 230V 50Hz (Plug into a power outlet)
Power cord (for Hongkong model)
When not using a cassette deck and for Hongkong and China models.
Side by side installation
Install the sets as shown in one of these diagrams. In either case, be sure that the tuner-amplifier's ventilation holes are not obstruchted.
Stacking installation
FM antenna
AM loop antenna
CD auto changer (UDCM-M7)
Tuner/amplifier (UDRA-M7)
Power plug (for China model)
Power cord (for Hongkong model)
Power plug (for China model)
Power plug AC 230V 50Hz (Plug into a power outlet)
Cassette deck (DRR-M7) (Option)
Power cord (for Hongkong model)
MD recorder (DMD-M7) (Option)
AUDIO OUT
DIGITAL OPTICAL OUT
VIDEO OUT
VIDEO OUT SWITCH
NTSC
PAL
SYSTEM CONNECTOR
DIGITAL OPTICAL
SYSTEM CONNECTOR

For Hongkong and China models, only UDCM–M7 has 2–pin plug (other unit, 3–pin plug. So only UDCM–M7 can plug into the AC outlet on UDRA–M7.

System operations

System operations, such as the timer and the auto on functions, as well as remote control operations cannot be performed unless all the RCA pin–plug cords and system connector cords are connected between the units, so be sure to make all the connections properly as shown in the diagram. Also, disconnecting system connectors while the system is operating may result in malfunction. Be sure to turn unplug the power cord before changing connections.

NOTES:

- Do not plug the power cord into the power outlet until all connections are completed. Be sure to interconnect the channels (L to L (white) and R to R (red)) properly, as shown on the diagram.
- Insert the plugs securely. Incomplete connections may result in noise.
- Be sure to connect the speaker cords between the speaker terminals and the speaker systems with the same polarities (+ to +, − to −) If the polarities are switched, the sound at the center will be weak, the position of the different instruments will be unclear, and the stereo effect will be lost.
- After unplugging the power cord, wait about 5 seconds before plugging it back in.
- Note that setting the connection cords (pin–plug cords) next to the power cords may result in humming or other noise
- The total power consumption of equipment connected to the AC outlets is 60 W Only use the outlets for D–M7 series components.
- The audio signals of a video CD cannot be recorded in digital.

GENERAL SECTION

[For Asia model]

5 PART NAMES, FUNCTIONS AND DISPLAYS

TUNER–AMPLIFIER

❶ **REMOTE SENSOR**
When operating the remote control unit, point it at this sensor.

❷ **PHONES (headphones jack)**
Plug the headphones into this jack.
No sound is produced from the speakers when headphones are plugged in.

❸ **Display**

❹ **BAND (AM / FM) selector button**
The band switches between AM and FM each time this button is pressed.

❺ **TUNING UP and DOWN buttons**
These buttons are used to select AM and FM stations and to set the clock and timer.

❻ **BASS control**
Use this to adjust the volume of the low frequencies.

❼ **TREBLE control**
Use this to adjust the volume of the high frequencies.

❽ **BALANCE control**
Use this to adjust the balance of the volume between the left and right channels. When set at the center position, the volume is the same for the left and right channels.

❾ **FUNCTION (input) selector button**
Use this to select the input (function).
The input changes in the following order each time this button is pressed: CD, TAPE, TUNER, MD and AUX. (The function changes automatically when the system's CD auto changer or cassette deck is played or when a preset channel is recalled on the tuner–amplifier.)

❿ **MONO / STEREO selector button**

AUTO mode:
Use this mode to receive programs in stereo.
The sound and the indicators on the display automatically switch between monaural ("MONO") and stereo ("STEREO") according to whether the program is being broadcast in monaural or stereo.

MONO mode:
Use this mode to receive programs in monaural, regardless of whether they are being broadcast in monaural or stereo.
Set this mode if there is much noise or if the signals are weak when receiving stereo programs (when "AUTO" is lit).

⓫ **MEMORY button**
This button is used to preset AM and FM stations and when setting the timer.

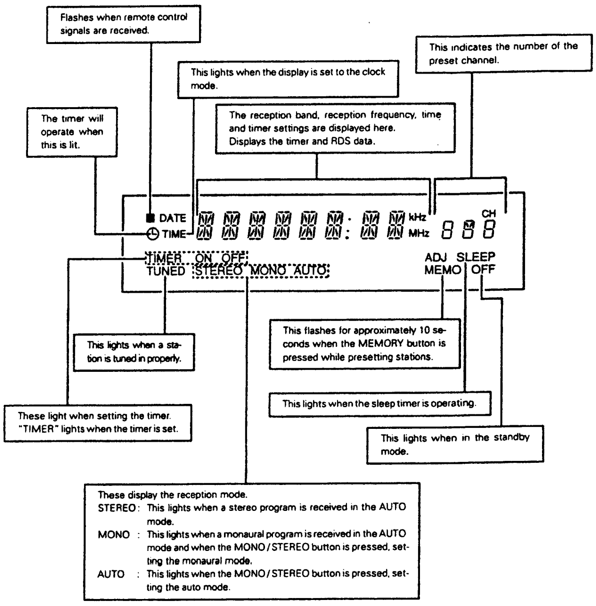
⓬ **VOLUME control**
Use this to adjust the overall volume.
The volume increases when the control is turned clockwise (↻) and decreases when it is turned counterclockwise (↺).

⓭ **TIMER button**
Press this when setting the timer and to turn the timer on so that it operates at the set times.
When the button is pressed after the timer has been set, the timer standby mark (" ◷ ") appears on the display.
Press again to turn the mark off.
The timer will not operate when the " ◷ " mark is off.

⓮ **DISPLAY selector button**
This button is used to switch the display between the reception frequency (function) and the clock.

⓯ **Power operation switch (ON / STANDBY)**
This turns the power for the entire system on and off.
Press this once to turn the power on, then press again to set the power to the standby mode.

TUNER–AMPLIFIER DISPLAY



Flashes when remote control signals are received.

This indicates the number of the preset channel.

This lights when the display is set to the clock mode.

The timer will operate when this is lit.

The reception band, reception frequency, time and timer settings are displayed here.
Displays the timer and RDS data.

This lights when a station is tuned in properly.

This flashes for approximately 10 seconds when the MEMORY button is pressed while presetting stations.

This lights when the sleep timer is operating.

These light when setting the timer.
"TIMER" lights when the timer is set.

This lights when in the standby mode.

These display the reception mode.
STEREO : This lights when a stereo program is received in the AUTO mode.
MONO : This lights when a monaural program is received in the AUTO mode and when the MONO / STEREO button is pressed, setting the monaural mode.
AUTO : This lights when the MONO / STEREO button is pressed, setting the auto mode.

NOTE:
- The timer standby mark (" ◷ ") does not light if the current time and the timer have not been set.

CD AUTO CHANGER

❶ **Power operation switch (ON / STANDBY) button**
Press this once to turn the CD auto changer's power on, then press again to set the CD auto changer to the standby mode. In the standby mode, "OFF" appears on the display.

❷ **MIC (Microphone jack)**
Plug the microphone plug into jack.

❸ **MIC VOL (Microphone volume control)**
Use this to adjust the volume of microphone.

❹ **Display**

❺ **KARAOKE button**
Press this to change the audio mode. (See page 20.)
The mode switches as follows each time the button is pressed:
1st press: VR (Vocal Reducer) ... The vocal signals of discs containing normal songs are decreased.
2nd press: MONO–L ... Only the left channel signals are output.
3rd press: MONO–R ... Only the right channel signals are output.
4th press: No display ... The normal stereo signals are output.

❻ **⏮**
(automatic search reverse) button
Use this to move to the beginning of a specific track.
When pressed during playback or in the pause mode, the pickup moves backward a number of tracks equal to the number of times the button is pressed.

❼ **KEY CONTROL buttons**
Use these to adjust the key of the sound being played.
+: The key increases by one half–note each time this button is pressed. (The key can be increased by up to three steps.)
–: The key decreases by one half–note each time this button is pressed. (The key can be decreased by up to three steps.)

❽ **⏭**
(automatic search forward) button
Use this to move to the beginning of a specific track.
When pressed during playback or in the pause mode, the pickup moves forward a number of tracks equal to the number of times the button is pressed.

❾ **■ (stop) button**
Press this button to stop playback.

❿ **▶ PLAY button**
Press this button to start playing the disc.
Even when the disc tray is open, the disc tray closes and playback begins when this button is pressed.
When pressed in the standby mode, the power automatically turns on and playback begins. (Auto on function)

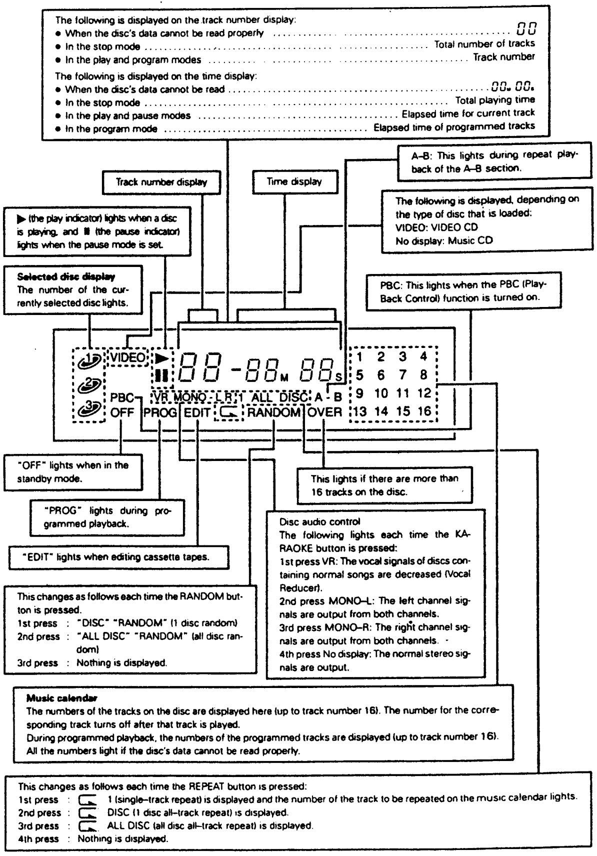
⓫ **DISC button**
Press this button to select the disc number. The Disc No. indicator changes each time the button is pressed. The disc whose indicator changes each time the button is pressed. The disc whose indicator is can be played.

⓬ **II (pause) button**
Press this button to stop playback temporarily.
Press the play button to cancel the pause mode and resume playback.

⓭ **Disc tray**
Load discs here.

⓮ **▲ OPEN / CLOSE button**
Press this to open and close the disc tray.
When pressed once, the disc tray opens out, and when pressed again, the disc tray closes. If a disc is loaded, the total number of tracks and total playing time of the disc are displayed several seconds after the disc tray is closed.
When pressed in the standby mode, the CD auto changer's power turns on.

CD AUTO CHANGER DISPLAY



The following is displayed on the track number display:
- When the disc's data cannot be read properly 00
- In the stop mode .... Total number of tracks
- In the play and program modes .... Track number

The following is displayed on the time display:
- When the disc's data cannot be read .... 00. 00.
- In the stop mode .... Total playing time
- In the play and pause modes .... Elapsed time for current track
- In the program mode .... Elapsed time of programmed tracks

A–B: This lights during repeat playback of the A–B section.

Track number display

Time display

▶ (the play indicator) lights when a disc is playing, and II (the pause indicator) lights when the pause mode is set.

The following is displayed, depending on the type of disc that is loaded:
VIDEO: VIDEO CD
No display: Music CD

Selected disc display
The number of the currently selected disc lights.

PBC: This lights when the PBC (Play-Back Control) function is turned on.

"OFF" lights when in the standby mode.

This lights if there are more than 16 tracks on the disc.

"PROG" lights during programmed playback.

Disc audio control
The following lights each time the KARAOKE button is pressed:
1st press VR: The vocal signals of discs containing normal songs are decreased (Vocal Reducer).
2nd press MONO–L: The left channel signals are output from both channels.
3rd press MONO–R: The right channel signals are output from both channels.
4th press No display: The normal stereo signals are output.

"EDIT" lights when editing cassette tapes.

This changes as follows each time the RANDOM button is pressed.
1st press : "DISC" "RANDOM" (1 disc random)
2nd press : "ALL DISC" "RANDOM" (all disc random)
3rd press : Nothing is displayed.

Music calendar
The numbers of the tracks on the disc are displayed here (up to track number 16). The number for the corresponding track turns off after that track is played.
During programmed playback, the numbers of the programmed tracks are displayed (up to track number 16).
All the numbers light if the disc's data cannot be read properly.

This changes as follows each time the REPEAT button is pressed:
1st press : ⮎ 1 (single–track repeat) is displayed and the number of the track to be repeated on the music calendar lights.
2nd press : ⮎ DISC (1 disc all–track repeat) is displayed.
3rd press : ⮎ ALL DISC (all disc all–track repeat) is displayed.
4th press : Nothing is displayed.

6 REMOTE CONTROL UNIT

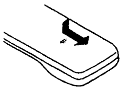
The D–M7 comes with a system remote control unit (RC–831).

Inserting the batteries

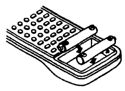
NOTES:

- Use R6P (AA) batteries in this remote control unit.
- Replace the batteries with new ones approximately once each year, though this depends on how frequently the remote control unit is used.
- Replace the batteries with new ones earlier if the remote control unit does not operate even from a short distance.
- Insert the batteries in the proper + and – direction, following the marks in the battery compartment.
- Remove the batteries when not using the remote control unit for extended periods of time.
- To avoid damage and leakage:
  - •Do not use a new battery with an old one.
  - •Do not use two different types of batteries.
  - •Do not short–circuit, take apart, heat or dispose of batteries in flames.
- If the batteries should leak, carefully wipe the fluid out of the battery compartment, then insert new batteries.

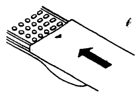
① Open the battery compartment cover on the back of the remote control unit.
Press the knob and open the cover in the direction of the arrow.



② Insert the two R6P (AA) batteries, following the + and – marks in the battery compartment.



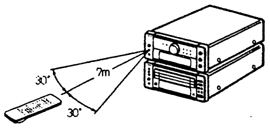
③ Close the cover of the battery compartment.



Using the Remote Control Unit

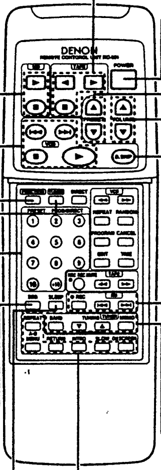
Cautions on Use

- The remote control unit may not operate if the remote sensor is exposed to direct sunlight or the strong light from a lighting fixture, or if there is an obstacle between the remote control unit and the remote sensor.
- Do not press buttons on the remote control unit and on the set at the same time. Doing so could result in malfunction.
- If the remote control unit is pointed away from the remote sensor during continuous operations (such as when turning the volume up or down), the operation will stop. If this happens, point the remote control unit at the remote sensor and press the button again.



- The remote sensor is located on the pre–main amplifier. Point the remote control unit at the remote sensor as shown on the diagram when operating it.
The remote control unit will operate from a direct distance of approximately 7 meters, but this distance will be shortened if obstacles are present or if operated at an angle.
(The remote control unit will operate at an angle of up to 30° in either direction.)

Remote Control Unit Part Names and Functions



CD operation buttons

■ (stop) button
Press this button to stop playback.

▶ (play) button
Press this button to start playback.

⏮ and ⏭
(automatic search buttons)
Use these buttons to search for the beginning of the desired track.

FUNCTION selector button

Press this button to switch the input (function).
The input changes in the following order each time this button is pressed:

→ CD → TAPE → TUNER → MD → AUX →

TUNER button

Press this button to recall preset stations from the remote control unit using the number buttons.

Number buttons

Press these buttons after pressing the TUNER button to recall preset stations.
When playing a CD, press these buttons after pressing the DIRECT or PROGRAM button to specify the desired track.

SDB (Super Dynamic Bass) button

Press this for a sound with more powerful base.

SLEEP button

Press this button to set the sleep timer.

MD recorder operation buttons

▶ (play) button
■ (stop) button

Cassette deck operation buttons

■ (stop) button
Press this button to stop the tape.

▶ (forward play) button
Press this to start playback or recording in the forward direction.

◀ (reverse play) button
Press this to start playback or recording in the reverse direction.

POWER operation switch

Use this switch to turn on the power of the entire system or set the power to the standby mode.

PRESET buttons

Use these buttons to recall preset stations on the tuner.

VOLUME buttons

Use these to adjust the volume.
The volume increases when the ▲ button is pressed and decreases when the ▼ button is pressed.

D. SKIP button

Press this button to select the disc number. The DISC NO. indicator changes each time the button is pressed. The disc whose indicator is lit can be played.

MD recorder buttons

● REC (recording) button
⏮ (automatic search reverse) button
⏭ (automatic search forward) button

BAND (AM / FM) selector button
TUNING buttons
MEMO button

REPEAT A–B button
Press this for A–B repeat playback. (See page 16.)

MENU button
Press this to turn the PBC (PlayBack Control) function on and off.
This button is effective at the stop mode.

RETURN button
Press this to return to the menu display.

INTRO button
Press this to display several still pictures on one screen to choose the track or scene to be played. (See page 19.)

SLOW button
Press this to set the slow play mode. (See page 19.)

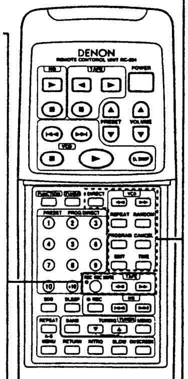
ON SCREEN button
Press this to display character data (the video CD's operating status, settings, etc.) on the screen. (See page 20.)
The TV screen display can only be used with video CDs.

Cassette deck operation buttons

● REC / REC MUTE button
To start recording from the stop mode, press this button, then press ◀, ▶.
When this button is pressed during the recording, a blank section of approximately 5 seconds is created, after which the recording standby mode is set.

◀◀ (rewind) button
Press this button to rewind the top side of the tape. (The bottom side of the tape is fast–forwarded.) Also use this button to search for the beginning of the current selection when playing in the forward (▶) direction, or to search for the beginning of the following selection when playing in the reverse (◀) direction.

▶▶ (fast–forward) button
Press this button to fast–forward the top side of the tape. (The bottom side of the tape is rewind.) Also use this button to search for the beginning of the following selection when playing in the forward (▶) direction, or to search for the beginning of the current selection when playing in the reverse (◀) direction.



CD auto changer operation buttons

DIRECT button
Press this button for direct search on the CD auto changer.

◀◀ and ▶▶
(manual search) buttons
Press these buttons during playback to move quickly forward or backward.

REPEAT button
Press this button for repeat playback.

RANDOM button
Press this button to play the tracks in random order.

PROGRAM button
Press this button for programmed playback on the CD auto changer.

CANCEL button
Press this button to clear the last track from the program.

EDIT button
Press this button for edited recording on a tape, dividing the tracks onto sides A and B according to the length of the tape.

TIME button
Press this button during the play or pause mode to switch the time display.
Normally the elapsed time for the track currently playing is displayed. When this button is pressed, the display switches to the

remaining time for the track
↓
total elapsed time on the disc
↓
total remaining time on the disc
↓
then back to the elapsed time per track

During programmed playback, the total remaining time display indicates the total remaining time of the programmed tracks.

GENERAL SECTION

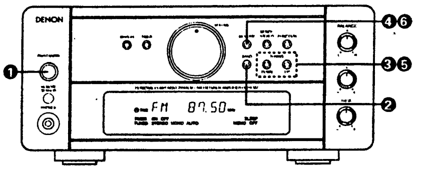
[For Asia model]

7 LISTENING TO RADIO PROGRAMS

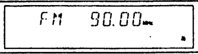
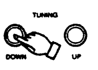
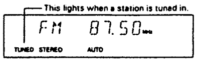
(Check the connections on Pages 5 and 6.)

TUNING

Tuner–amplifier
(UDRA–M7)



Example: Tuning in FM 87.50 MHz
(AM stations are tuned in using the same procedure.)

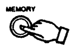
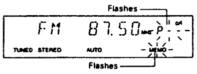
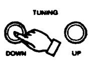
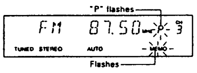
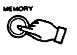
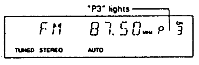
1	Set the VOLUME control on the tuner–amplifier to the minimum position, then press the POWER operation switch to turn on the power.		
2	Press the BAND button on the tuner–amplifier to select the FM band.		
3	Use the TUNING UP and DOWN buttons to tune the frequency to 87.50. Once the frequency is tuned in, adjust the volume to the desired level using the VOLUME control.		 This lights when a station is tuned in. FM 87.50 TUNED STEREO AUTO

Auto Tuning

- When one of the TUNING buttons is pressed, the frequency changes in steps of 50kHz in the FM band, 9kHz in the AM band.
- If one of the TUNING buttons is held in for over 1 second, the frequency continues to change when the button is released (auto tuning) and stops when a station is tuned in. Tuning will not stop at stations whose reception is poor.
- To stop the auto tuning function, press the UP or DOWN button once.

Presetting AM and FM Stations

Example: Presetting FM 87.50 (currently tuned in) at preset number 3

4	Press the MEMORY button. The MEMO indicator flashes for 10 seconds.		
5	Use the UP and DOWN buttons to call out the number at which you want to preset the station (3), or simply press the corresponding number button ③ on the remote control unit.		 "P" flashes FM 87.50 P 3 TUNED STEREO AUTO MEMO Flashes
6	Press the MEMORY button while the MEMO indicator is flashing.		
Up to 40 AM or FM stations can be preset using this procedure.			

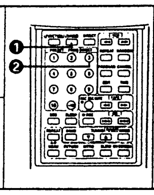
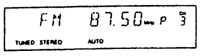
NOTES:

- In addition to the reception frequency, the reception mode (monaural or auto) is also preset, so check the display when presetting stations.
- If a station is preset at a number where a station is already preset, the previous station is replaced with the new station.
- The preset memory is not cleared when the power cord is unplugged.

Listening to Preset Stations

The preset stations can be recalled using the number buttons on the remote control unit.
Also, if the following operation is performed when the system power is off, the power automatically turns on and the radio is played. (Auto on function)

Example: Listening to the station preset at number 3
(This operation is only possible from the remote control unit.)

1	Press the TUNER button on the remote control unit.		
2	Press button "3" on the remote control unit.		

Receiving FM programs in stereo

- Press the MONO/STEREO selector button to turn on the "AUTO" indicator. When a program being broadcast in stereo is received, the "STEREO" indicator lights and the program is received in stereo.
- If reception is poor and there is much noise in the stereo signals, press the MONO/STEREO selector button to set the monaural mode.

NOTE:

- A humming sound may be heard when using a TV nearby while receiving AM programs. If this happens, move the system as far from the TV as possible.

8 USING THE TIMER

The time and timer functions are incorporated in the tuner–amplifier

Timer Settings

■Types of timer operations

TIMER	: Use this to turn the power on and off at the same times every day.
SLEEP TIMER	: Use this to set the power to turn off after 10 to 60 minutes, in steps of 10 minutes (operated from the remote control unit).

■Notes on timer settings

- Be sure to set the current time beforehand.
- To listen to or record a radio program ("air check") using the timer, be sure to preset the station beforehand. (Refer to "Presetting AM and FM Stations" on Page 11.)

Power Failures

Should there be a power failure or should the power cord be unplugged, the time display will flash. If this happens, reset the current time.
Also check the timer and tuner presettings, and reset them if they have been cleared.

Checking the Settings

To check the timer settings, press the TIMER button for at least 4 seconds. (This can also be done when the tuner's power is off.) Next, press the MEMORY button repeatedly to display the timer start mode, the reception band and preset channel number when in the tuner mode, the on time and the off time. Press the MEMORY button once more to return to the current mode display.

Changing the Settings

Repeat the timer setting operation to erase the previous settings and set the new settings.

Clearing the Settings

Press the TIMER button for at least 4 seconds, then press it for at least 4 seconds again while "FUNC" is displayed to clear the timer settings.

Note on Setting the Timer

If the time set with the timer is reached while the system power is on, the operation switches to the operation set by the timer.

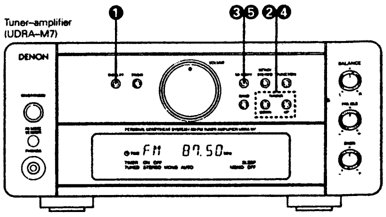
Turning the Timer Off

Press the TIMER button to turn the ◷ mark off.

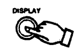
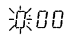
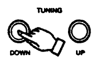
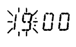
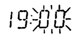
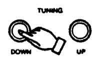
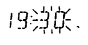
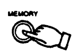
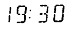
Setting the Current Time

The time is displayed in the 24–hour mode.

Tuner–amplifier
(UDRA–M7)



Example: Setting to 19:30 (7:30 p.m.)

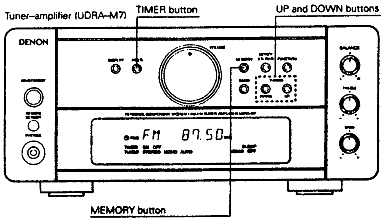
1	Press the DISPLAY button for at least 4 seconds.		 The hours place flashes. (If the hours have already been set, that number flashes.)
2	Use the UP and DOWN buttons to set the hours.		 The hours place flashes
3	Press the MEMORY button.		 The minutes place flashes (If the minutes have already been set, that number flashes.)
4	Use the UP and DOWN buttons to set the minutes.		 The minutes place flashes
5	Press the MEMORY button at the sound of a time service's chime. The time display stops flashing and the clock starts running.		 The display stops flashing and the clock starts running from 00 seconds.

- The current time can be set even when the power is off.

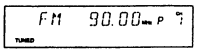
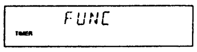
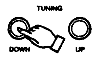
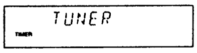
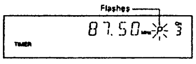
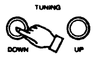
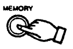
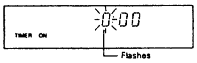
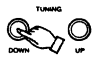
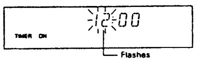
Setting the Timer

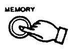
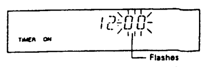
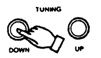
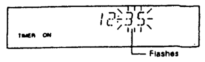
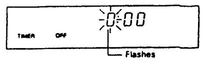
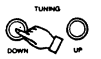
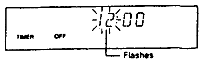
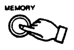
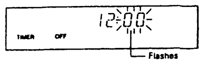
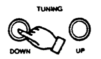
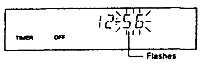
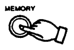
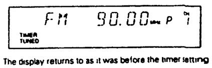
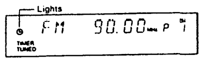
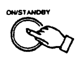
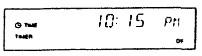
The power can be set to turn on and off every day at the same time in any of six modes: CD, TAPE, TUNER, MD, AIRCH (recording from the radio onto the cassette deck) and AIRCH MD (recording from the radio onto the MD recorder).

Tuner–amplifier (UDRA–M7)


TIMER button
UP and DOWN buttons
DENON
MEMORY button
FM 87.50

Example: Setting the tuner to turn on at 12:36, off at 12:56 (with FM 87.50 MHz preset at channel "3")

1	Press the POWER operation switch on the tuner–amplifier to turn on the system's power.		 FM 90.00 MHz P CH 1 TUNED Say that FM 90.00 MHz is tuned in at preset channel number "1".
2	Press the TIMER button for at least 4 seconds to set the timer setting mode.		
3	Use the UP and DOWN buttons to set the "TUNER" mode.	 TUNING DOWN UP	 TUNER TIMER
4	Press the MEMORY button.		 Flashes 87.50 MHz P CH 3 TIMER
5	Use the UP and DOWN buttons to set the preset channel number.	 TUNING DOWN UP	
6	Press the MEMORY button.		 0:00 TIMER ON Flashes (If the timer has already been set, that number flashes.)
7	Use the UP and DOWN buttons to set the hours for the timer on time.	 TUNING DOWN UP	 12:00 TIMER ON Flashes

8	Press the MEMORY button.		 12:00 TIMER ON Flashes (If the timer has already been set, that number flashes.)
9	Use the UP and DOWN buttons to set the minutes for the timer on time.	 TUNING DOWN UP	 12:35 TIMER ON Flashes
10	Press the MEMORY button.		 0:00 TIMER OFF Flashes
11	Use the UP and DOWN buttons to set the hours for the timer off time.	 TUNING DOWN UP	 12:00 TIMER OFF Flashes
12	Press the MEMORY button.		 12:00 TIMER OFF Flashes (If the timer has already been set, that number flashes.)
13	Use the UPand DOWN buttons to set the minutes for the timer off time.	 TUNING DOWN UP	 12:56 TIMER OFF Flashes (If the timer has already been set, that number flashes.)
14	Press the MEMORY button.		 FM 90.00 MHz P CH 1 TIMER TUNED The display returns to as it was before the timer setting mode was set.
15	Press the TIMER button.		 Lights FM 90.00 MHz P CH 1 TIMER TUNED
16	Press the POWER operation switch on the tuner–amplifier to turn off the system's power.		 TIME 10: 15 PM TIMER OFF

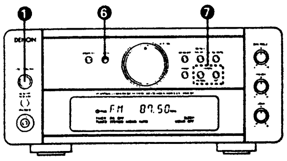
If the ◷ mark is displayed after the TIMER button is pressed, the timer will operate at the same times every day. To turn the timer off, press the TIMER button again to turn the ◷ mark off.

NOTE:

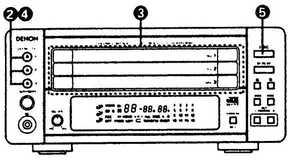
- The standby mark (" ◷ ") will not light if the current time is not set. If this is the case, set the current time, then press the TIMER button.
- Be sure to set the power to the standby mode when using the timer.

Various Timer Operations

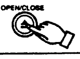
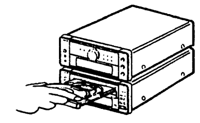
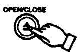
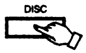
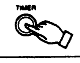
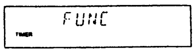
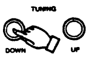
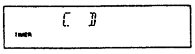
Tuner–amplifier (UDRA–M7)


1
6
7
DENON
FM 87.50

CD auto changer (UDCM–M7)



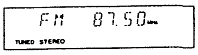
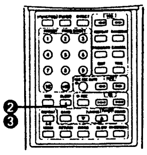
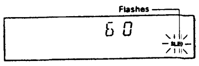
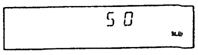
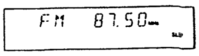
Example 1: Playing a compact disc with the timer

1	Press the POWER operation switch on the tuner–amplifier to turn on the system's power.		
2	Press the CD auto changer's ▲ OPEN/CLOSE button to open the disc tray.		
3	Load the disc in the disc tray. Refer to Page 16.		
4	Press the CD auto changer's ▲ OPEN/ CLOSE button again to close the disc tray.		
5	Press the DISC button to select the disc to be played.		
6	Press the tuner–amplifier's TIMER button for at least 4 seconds.		
7	Use the tuner–amplifier's UP and DOWN buttons to set the "CD" mode.	 TUNING DOWN UP	
8	Now follow steps 6 to 16 under "Setting the Timer" on Page 13.		

Setting the Sleep Timer

With this function, the power can be set to turn off after 10 to 60 minutes, in steps of 10 minutes, using the remote control unit.

Example: To turn the power off after 50 minutes when listening to FM 87.5 MHz
(This operation is only possible from the remote control unit.)

1	Tuner currently set to FM 87.50 MHz		 FM 87.50 MHz TUNED STEREO
2	Press the SLEEP button.		 Flashes 60 SLEEP
3	Press the SLEEP button again while the "SLEEP" indicator is flashing.		
4	The previous display reappears after 5 seconds. The "SLEEP" indicator remains lit, indicating that the sleep timer is functioning.		 FM 87.50 MHz SLEEP

- The time is reset to "60" (60 minutes) if the SLEEP button is pressed again while the sleep timer is functioning.

Cancelling the Sleep Timer

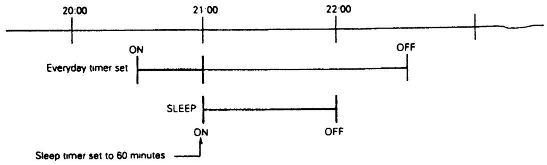
Press the SLEEP button repeatedly until the "SLEEP" indicator turns off.
The sleep timer is also cancelled if the tuner–amplifier's Power operation switch (ON / STANDBY) or the POWER switch on the remote control unit is pressed, turning the system power off.

NOTE:

- If the times set with the sleep and everyday timers overlap, the sleep timer has priority.

Order of priority of the sleep and everyday timers

The sleep timer has priority for the off time. (The system operates as indicated by the bold lines.)


20:00
21:00
22:00
ON
OFF
Everyday timer set
SLEEP
ON
OFF
Sleep timer set to 60 minutes

Even when the power was turned on with the timer, the power turns off if the remaining time of the sleep timer reaches " 10 " before the off time set with the everyday timer is reached. If the everyday timer's on time is reached while the sleep timer is functioning, the everyday timer does not function.

GENERAL SECTION

[For Asia model]

9 PLAYING CDs

About Compact Discs

Playable discs

The types of discs that can be played on the D–M7 are listed below.
The marks are located on the disc's label or jacket.

Mark	Disc	Size	Recorded side	Audio recording system	Video recording system
COMPACT disc DIGITAL VIDEO	Video CD single	8 cm	One side	Digital	Image compression
	Video CD	12 cm	One side	Digital	Image compression
COMPACT disc DIGITAL AUDIO GRAPHICS	CD graphics single	8 cm	One side	Digital	CD–G
	CD graphics	12 cm	One side	Digital	CD–G
COMPACT disc DIGITAL AUDIO	CD (Compact Disc) single	8 cm	One side	Digital	—
	CD (Compact Disc)	12 cm	One side	Digital	—

CDs (Compact Discs)

These are digital audio discs containing music.

Video CDs

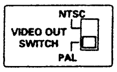
These are CD–size discs containing image and audio signals using moving picture compression technology. When played, the player restores the compressed signals recorded on the disc to their original form.

CD–Gs (CD graphics)

CD–Gs are discs containing still pictures or character data in addition to regular CD audio signals.
When using CD–Gs for karaoke, the still pictures and lyrics are displayed after the title.

NOTES:

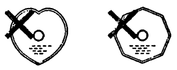
- The D–M7 is compatible with Version 2.0 format video CDs. Discs in Version 1.1 format can also be played.
- The D–M7 is designed for use with NTSC and PAL systems. Discs with images for other TV systems (SECAM, etc.) cannot be used on the D–M7.
- Either an NTSC or a PAL type TV (or monitor) can be connected to the D–M7. Set the VIDEO OUT switch on the rear panel to either the NTSC or PAL side, according to the type of TV connected.
  Note that pictures will not be displayed properly if an NTSC disc is used with a PAL TV (or monitor) or vice versa. Make sure the disc and TV (or monitor) are of the same type.
- It is prohibited by law to copy, broadcast, screen, cable–broadcast, play in public, rent or lend discs.
- The picture may be disturbed when the pause, A–B repeat and search modes are set while playing a CD–G disc.



Only discs with the mark shown left can be played on the D–M7.

Use compact discs that include the disc mark.

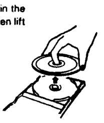
CD's with special shapes (heart–shaped CDs, octagonal CDs etc) cannot be played on this set Attempting to do so may damage the set. Do not use such CDs.



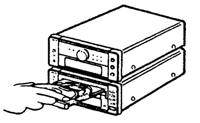
- For CDVs, only the audio part is played. (The video part is not played.)

■ Removing discs from their cases

As shown on the diagram, grasp the outer edge of the disc with your fingers, insert a finger in the center hole, press gently, then lift the disc out of the case.



■ Loading discs in the disc tray



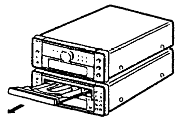
Be sure to load the disc with the labelled side facing up. (Compact discs only play on one side.) For 8cm CDs, set the disc in the sunken section in the center of the tray.

NOTES:

- The disc tray opens when the ▲ OPEN/CLOSE button is pressed once and closes when it is pressed again.
- When the disc tray is closed, the disc turns automatically for several seconds, then the total number of tracks and total playing time of that disc appear on the display.
- The disc tray can also be closed by pressing the ▶ PLAY button, in which case playback automatically starts from the first track on the disc (or if tracks are programmed, from the first programmed track).

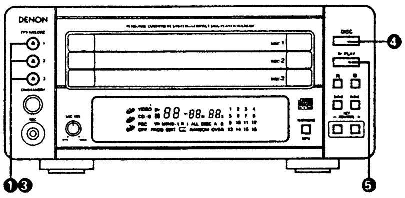
Handling the Disc Tray

Do not turn off the power, stop the disc tray by hand or pull on it when it is moving. Doing so may damage it.
If the headphones' cord or some other object accidentally gets caught in the disc tray while it is closing and the disc tray stops, press the ▲ OPEN/CLOSE button again to open the tray and remove the obstacle.
Do not set objects other than discs on the disc tray. Doing so may damage it.

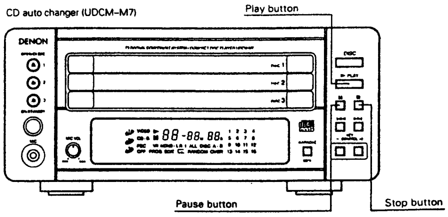


Normal Playback

CD auto changer (UDCM–M7)

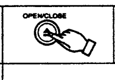
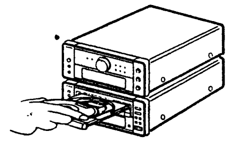
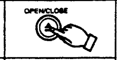
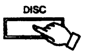


CD auto changer (UDCM–M7)



Example: Playing a disc containing 16 tracks and with a playing time of 62 minutes, 03 seconds, starting from the first track

The R mark indicates operations which can also be performed on the remote control unit.

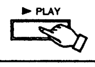
1	Press the ▲ OPEN/CLOSE button of the disc tray you want to open the disc tray.	 OPEN/CLOSE	OP EN
2	Load the CD in the disc tray.		
3	Press the ▲ OPEN/CLOSE button. The disc tray closes. The display appears after several seconds.	 OPEN/CLOSE	16 62ₘ03ₛ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
4	Press the DISC button to select the disc to be played.	 DISC	
5	Press the ▶ PLAY button. R	▶ PLAY	▶ 01 00ₘ01ₛ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Interrupting playback temporarily

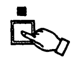
Press the ❚❚ (pause) button.	❚❚	The " ❚❚ " mark appears on the display, and playback stops at the point where the button was pressed.

- The picture may be disturbed when the pause mode is set while playing a CD–G disc.

Resuming playback

Press the ▶ PLAY button. R	 ▶ PLAY	The " ❚❚ " mark turns off on the display, and playback resumes from the point where the pause button was pressed.

Stopping playback

Press the ■ (stop) button. R	 ■	16 -62ₘ03ₛ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

NOTES:

- When a disc is loaded, " 00ₘ00ₛ " is displayed on the display for several seconds while the data on the number of tracks and total playing time is being read from the innermost side of the disc, after which the number of tracks and total playing time appear.
- If no disc is loaded, if the disc is upside down, or if the data cannot be read properly due to scratches or dirt, the display reads as shown below and the disc will not play.

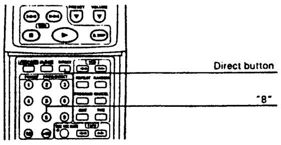
00 00ₘ00ₛ

Various Playback Functions

In addition the regular playback, the D–M7 also offers the following playback functions:

❶ Playing a specific track …… **Direct Search**

(Using the remote control unit)
Example: Playing the 8th track

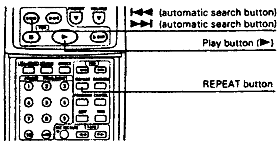


① Press the DIRECT button.
② Press the button corresponding to the number of the track 8. "8" appears on the track number display and playback of track number 8 begins.

- When the end of the track is reached, playback continues on the next track.
- To specify a track number of 11 or greater, say track 15, press [+10] then [5], and to specify a track number of 20 or greater, say track 23, press [+10], [+10] then [3].
  To play track 20, press [+10] then [10].

❷ Playing a single track repeatedly …… **Single–track Repeat**

(Using the remote control unit)



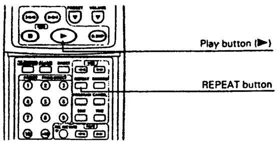
① When the REPEAT button is pressed once, ⊏ 1 appears on the display and the single–track repeat mode is set.
② Use the ⏮ and ⏭ buttons to select the track to be repeated.
③ Press the play button (▶) to start playback.

- When the end of the specified track is reached, playback starts over from the beginning of that track.
- The single–track repeat mode can also be set by pressing the REPEAT button once during playback.
- To cancel the single–track repeat mode, press the REPEAT button repeatedly until the " ⊏ " indicator turns off.

NOTE: This function will not work when the PBC function is turned on with video CDs (Ver. 2.0).

❸ Playing all the tracks repeatedly …… **All–track Repeat**

(Using the remote control unit)



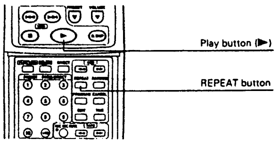
① When the REPEAT button is pressed twice, ⊏ DISC appears on the display and the all–track repeat mode is set.
② Press the play button (▶) to start playback.

- The all–track repeat mode can also be set by pressing the REPEAT button twice during playback.
- To cancel the all–track repeat mode, press the REPEAT button to turn the " ⊏ " indicator off.
- If the REPEAT button is pressed during programmed playback, the tracks are played repeatedly in the programmed order.

NOTE: This function will not work when the PBC function is turned on with video CDs (Ver. 2.0).

❹ Playing all the disc repeatedly …… **All–disc Repeat**

(Using the remote control unit)



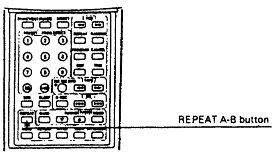
① When the REPEAT button is pressed, ⊏ ALL DISC appears on the display and the all–disc repeat mode is set.
② Press the play button (▶) to start playback.

- The all–disc repeat mode can also be set by pressing the REPEAT button 3 times during playback.
- To cancel the all–disc repeat mode, press the REPEAT button to turn the " ⊏ " indicator off.
- If the REPEAT button is pressed during programmed playback, the tracks are played repeatedly in the programmed order.

NOTE: This function will not work when the PBC function is turned on with video CDs (Ver. 2.0).

❺ Playing a certain section repeatedly …… **A–B Repeat**

(Using the remote control unit)



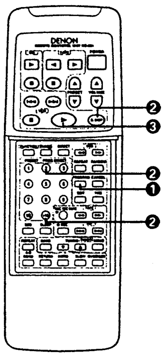
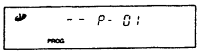
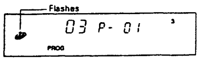
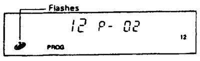
① During playback, press the REPEAT A–B button at the point where you want to start repeating (A). "A" appears on the display and the A–B repeat mode is set.
② Press the REPEAT A–B button again at the point where you want to stop repeating (B). " ⊏ " and "A–B" appear on the display, the pickup returns to point A, and playback of the A–B section begins.

- To cancel the A–B repeat mode, press the REPEAT A–B button to turn the " ⊏ " and "A–B" indicator off.
- There must be a space of at least 3 seconds between points A and B.

❻ Playing the tracks in a certain order …… **Programmed Playback**

(Using the remote control unit)

Procedure

1	Press the PROGRAM button.	 	
2	Press the D. SKIP, number and +10 buttons to select the disc to be programmed. • For example, to program the 3rd track on the 2nd disc and the 12 track on the 3rd disc, press [D. SKIP] (② flashes), [3], [D. SKIP] (③ flashes), [+10], and [2].		 display when the 3rd track is set at the first place  display when the 12th track is set at the second place
3	Press the ▶ play button.		The tracks are played in the programmed order.

- When the TIME button is pressed before playback, the total playback time of programmed tracks is displayed.
- Press the DIRECT button to resume normal playback during the programmed playback.
- To cancel the entire program, press the DIRECT button or cancel the program one by one using the CANCEL button.
- If you program the wrong track, press the CANCEL button then program the right track (The last track in the program is erased each time the CANCEL button is pressed.)

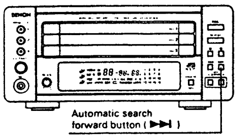
Other operations possible during programmed playback:
Such operations as quick search, pause and skip monitor are also possible during programmed playback.
For the quick search function, press the automatic search reverse button (⏮) to move back to the beginning of the track, then press it again while the time display reads " 00:00 " to move back to the beginning of the preceding track.
To move ahead to the beginning of the next track, press the automatic search forward button (⏭), regardless of the time display.

NOTES:

- The numbers of the programmed tracks on the music calendar turn off after the tracks have been played.
- With this CD auto changer, up to 16 tracks with any track number between 1 and 99 can be programmed.
- If a number greater than the number of tracks recorded on the disc is programmed, that number is skipped during programmed playback.
- The program settings are retained until the program is cleared.
- If a number greater than the total number of tracks on the disc is specified, that number will not be displayed.
- Programming is also possible with the disc tray open. In this case it is possible to program a track number not included on the disc, but when the program is played, that track number will be skipped.
- If you make a mistake when programming, press the CANCEL button to cancel the mistake. (The last track in the program is cancelled each time the CANCEL button is pressed.)
- Set the stop mode when cancelling tracks from the program.

❼ Moving ahead to the next track during playback …… **Quick Search**

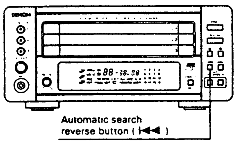
CD auto changer (UDCM–M7)



Press the automatic search forward button (⏭).

❽ Moving back to the beginning of the track during playback …… **Quick Search**

CD auto changer (UDCM–M7)

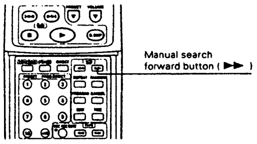


Press the automatic search reverse button (⏮).

❾ Finding a certain spot on the disc while listening to the sound …… **Skip Monitor**

- Use this function to skip through the disc while listening to the sound.
- When the desired spot is reached using the skip monitor function, release the manual search forward button (⏩) or manual search reverse button (⏪) to resume normal playback from that point.

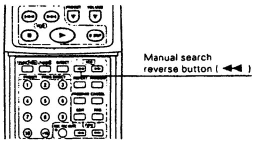
(1) Forward skip monitor
(Using the remote control unit)



- The track currently being monitored and the elapsed time for that track are indicated on the display.
- If the manual search forward button (⏩) is held in until the end of the disc is reached, the next disc is selected.
  If the manual search forward button (⏩) is held in until the end of disc 3 is reached, the stop mode is set.

During playback, press and hold in the manual search forward button (⏩) to skip through the disc in the forward direction while listening to the sound.

(2) Reverse skip monitor
(Using the remote control unit)

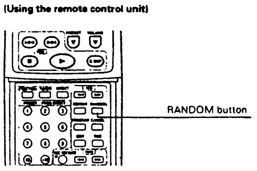


- The track currently being monitored and the elapsed time for that track are indicated on the display.
- If the manual search reverse button (⏪) is pressed continuously, it will reach the beginning of the first track on the disc. Release the manual search reverse button (⏪) to resume normal playback

During playback, press and hold in the manual search reverse button (⏪) to skip through the disc in the reverse direction while listening to the sound.

❿ Playing all the tracks on the disc in random order …… **All–track Random**

(Using the remote control unit)



① Press the RANDOM button once in the stop mode.

- "RANDOM" and "DISC" appear on the display and the all-track random mode is set.
- If the RANDOM button is pressed during repeat playback, all the tracks are played once in random order, then playback again in a different order, and this is repeated.
- To cancel the all–track random mode, press the STOP button to turn the "RANDOM" and "DISC" indicators off.
- The track numbers that can be played in random order are track numbers 1 to 99.

NOTES:

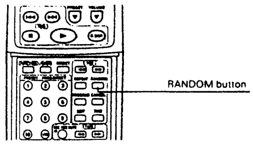
- The total remaining time cannot be displayed during the all–track random mode.
- The all–track random mode cannot be set during editing.
- The single–track repeat mode cannot be set during random playback.
- This function will not work when the PBC function is turned on with video CDs (Ver. 2.0).

GENERAL SECTION

[For Asia model]

⓫ Playing all the tracks on all the discs in random order .... **All-disc Random**

(Using the remote control unit)



① In the stop mode, press the RANDOM button twice.

- The "RANDOM" and "ALL DISC" indicators light, and the tracks from all the discs are played in random order.
- If the RANDOM button is pressed in the repeat play mode, all the tracks are played once in random order, then played again in a different order, and this is repeated.
- To cancel the all-track random mode, press the STOP button to turn the "RANDOM" and "DISC" indicators off.
- The track numbers that can be played in random order are track numbers 1 to 33 on the different discs.

NOTES:

- The total remaining time cannot be displayed during the all-track random mode.
- The all-track random mode cannot be set during editing.
- The single-track repeat mode cannot be set during random playback.
- This function will not work when the PBC function is turned on with video CDs (Ver. 2.0).

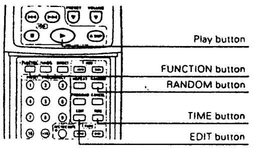
Edited Recording on Sides A and B of a Tape

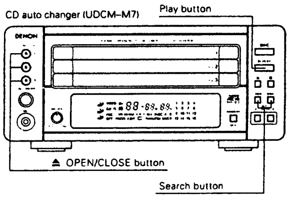
This function allows edited recording according to the size of the tape. (This operation is only possible from the remote control unit.) Edited recording is a system function of the D-M7 series. This function can only be used in combination with the DRR-M7.

- Use this function to efficiently edit the tracks on a CD according to the length (time) of the tape onto which you want to record.

NOTES:

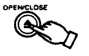
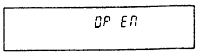
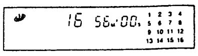
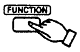
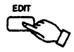
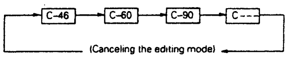
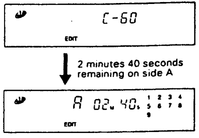
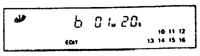
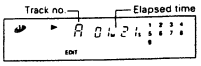
- In the edited recording mode, it is programmed so that the remaining time of the tape becomes minimum and the last programmed track may be out of line on both side. If you want to make serial track recording in this case, use the CD SRS button after stopping the edited recording mode.
- Load the cassette tape onto which you want to record in the cassette deck with side A on the top before starting the editing procedure. The tape is automatically wound to the beginning before recording starts.
- The editing mode is cancelled when the CD auto changer's stop button is pressed.
- Note that even if the tape is slightly longer than the disc's total playing time, it may not be possible to record all the tracks on sides A and B because of the combination of tracks to be recorded on the different sides of the tape.
- When recording on an already recorded tape, if the tape is longer than the new recording, the previous recording will remain at the end of side B, so erase the tape before starting.
- To protect the recording, do not press the FUNCTION (input selector) button during edited recording.
- During edited recording, only the stop button, POWER switch, and TIME button for the CD auto changer and the RESET button, stop button, DOLBY NR button, and POWER switch for the cassette deck will function.
- Blank sections of 5 seconds are automatically created between all the selections to make it easier to search for selections on tapes recorded on this system. Since this differs from the actual time between tracks on the CD, the displayed time and the actual remaining time on the tape differ slightly.
- Set the reverse mode on the cassette deck (DRR-M7) to ⊐ or ⊏⊐ during edited recording.
- The total remaining time cannot be displayed during the programmed edited recording.
- When using the editing function with discs containing more than 21 tracks, only 20 tracks can be edited.





❶ Recording the tracks in the same order as on the disc .... **Automatic Edited Recording**

Example: Recording a disc containing 16 tracks and a total playing time of 56 minutes on a C-60 cassette tape

1	Press the CD auto changer's ▲ OPEN/ CLOSE button to open the disc tray. Load the disc in the disc tray.		
2	Press the ▲ OPEN/CLOSE button to close the disc tray. The display appears after several seconds.		 16 56.00. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3	Press the FUNCTION button on the tuner-amplifier to set the CD mode.		
4	Press the EDIT button on the remote control unit to set the length of the tape. (The length is the total for sides A and B.) For a 60-minute (C-60) tape, press the EDIT button 2 times.		Load the cassette tape onto which you want to record in the cassette deck with side A facing up.
	The display changes as shown below each time the EDIT button is pressed. (If the tape length has already been set once, the display changes starting from that length.)  C-46 C-60 C-90 C--- (Canceling the editing mode) Inputting other tape sizes: To input other tape sizes, use the number buttons when "C---" is displayed.		Example: For a 60-minute tape  C-60 EDIT 2 minutes 40 seconds remaining on side A A 02.40. 1 2 3 4 5 6 7 8 9 EDIT Side A display - Tracks 1 to 9 will be recorded on side A.
5	After this, the remaining times for sides A and B are displayed alternately for several seconds each.		1 minute, 20 seconds remaining on side B  Side B display
6	Press the play button on the remote control unit or the CD auto changer.		 Track no. Elapsed time A 01.21. 1 2 3 4 5 6 7 8 9 EDIT
7	The tape is automatically wound to the beginning on the cassette deck, then recording starts.		

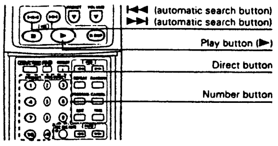
- To set a time other than 46, 60 or 90, input the time when "C---" is displayed. The time can be set to up to 99 minutes. The time is input in the same way as when inputting track numbers for the CD direct search operation.

Playing Video CDs

❶ Selecting and playing tracks using the menu function .... **Menu Function**

- The menu function can be used to select and play tracks for video CDs with PBC (PlayBack Control).
- Also carefully read the explanation included with the disc.
- This function will not work for video CDs without PBC, CD-Gs or regular CDs. Use normal playback for such discs.

(Using the remote control unit)



① Load the disc then press the ▶ (PLAY) button. The menu appears on the display.

② Use the automatic search reverse (⏮) and automatic search forward (⏭) buttons to switch the menu screen.

- Press the automatic search forward button (⏭) to move forward to the next screen.
- Press the automatic search reverse button (⏮) to move back to the previous screen.

③ Press the DIRECT button, then use the number buttons to select the desired number. Playback of the track with the selected number begins.

- To stop playback, press the ■ (STOP) button.
- To stop playback and return to the menu screen, press the RETURN button.

NOTES:

- If the menu screen is still displayed once the track has stopped playing, the disc is still spinning. If you do not want to play another track, be sure to press the ■ (STOP) button to turn off the menu screen.
- With some discs, playback will start automatically if nothing is done while the menu screen is displayed.

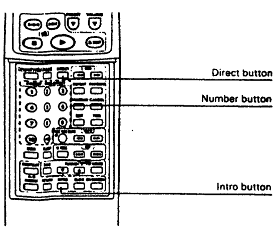
❷ Selecting the track from a screen displaying various tracks .... **Intro Scan Function**

- The track or scene can be selected from a single screen displaying several still pictures.
- For discs with PBC (PlayBack Control), press the MENU button while in the stop mode and first set the normal play mode.
- This function cannot be used with music CDs and CD-Gs.

(1) Searching for tracks on a single disc

- Use this function to select a track from a screen displaying the first scenes from up to 9 tracks on the disc.

(Using the remote control unit)



① Press the INTRO button while the stop mode. Still pictures of the first scenes in tracks 1 to 9 of the currently selected disc are displayed.

- To search for track numbers 10 and over, press the automatic search forward button (⏭). (Still pictures of the first scenes in tracks 10 to 18 of the currently selected disc are displayed.)
- To return to the previous screen, press the automatic search reverse button (⏮).

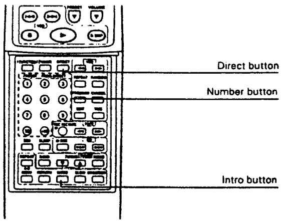
② Press the DIRECT button, then use the number buttons to select the desired number. Playback of the track with the selected number begins.

- To cancel the intro scan mode, press the ■ (STOP) button.

(2) Searching for scenes within a track

- Use this function to divide a single track into 9 parts and display the first scenes of each part to select the desired scene. This function comes in handy when you want to start playing from the middle of movie, etc., that is not divided into many tracks.

(Using the remote control unit)



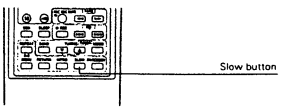
① Press the INTRO button during playback. Still pictures of 9 scenes in the track are displayed in order.

② Press the DIRECT button, then use the number buttons to select the desired number. Playback begins. (In some cases playback may not start from exactly the scene displayed.)

- To cancel the intro scan mode, press the ■ (STOP) button.

❸ Playing pictures slowly .... **Slow Play**

(Using the remote control unit)



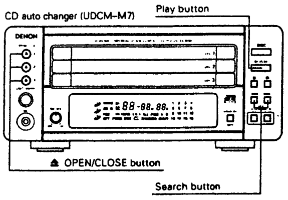
① Press the SLOW button while in the play or pause mode with a video CD. Slow playback begins. No sound is produced during slow playback.

- The speed switches between 1/4, 1/8 and normal speed each time the SLOW button is pressed.

GENERAL SECTION

[For Asia model]

Using the Karaoke Functions



❶ Using the microphone

- You can sing karaoke by connecting a separately sold microphone to the microphone jack.

① Turn the microphone volume control counterclockwise and set it to the "MIN" position.
② Connect the microphone to the microphone jack.
③ Turn the microphone volume control clockwise and set it to the desired position.

❷ Setting a comfortable key ………… **Key Control Function**

- The key of the track can be increased or decreased.

① The key increases by one half–note each time the " + " button is pressed. (The key can be increased by up to three steps.)
② The key decreases by one half–note each time the " – " button is pressed. (The key can be decreased by up to three steps.)

NOTE: The key control setting is stored in the memory until the power is turned off.

❸ Singing karaoke using the KARAOKE button ………… **Karaoke Function**

- You can sing karaoke by reducing the vocal signals of CDs containing regular songs.
- For CDs, etc., on which the music and vocals are split between the left and right channels, you can output only the left or right channel.

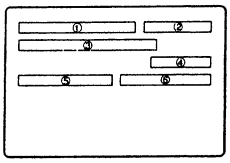
The mode switches as follows each time the button is pressed:
1st press: VR (Vocal Reducer) ... The vocal signals of discs containing normal songs are decreased.
2nd press: MONO–L ... Only the left channel signals are output.
3rd press: MONO–R ... Only the right channel signals are output.
4th press: No display ... The normal stereo signals are output.

NOTES:

The Vocal Reducer may not provide sufficient vocal reduction for the following types of discs or tracks:

- Multiple audio discs
- Discs recorded in monaural
- Songs using only a few instruments
- Duets
- Tracks on which the vocals are not centered

TV screen display



❶ Operation display section
DISC□ OPEN, DISC□ CLOSE, READING,
DISC□, MENU ON, MENU OFF,
OSD ON, OSD OFF, PROGRAM DISC□,
RANDOM DISC□, TIME □□:□□,
DISC INTRO, TRACK INTRO

❷ Mode display section
PLAY, STOP, PAUSE, ▶▶|, |◀◀, ▶▶,
◀◀, SLOW1, SLOW2, NEXT, PREV,
RETURN, SELECT

❸ Track number display section
TRACK □□, SELECT □□,
TRACK □□ No. □□

❹ Repeat display section
A–, A ↻ B, ↻ 1 TRACK, ↻ DISC,
↻ ALL DISC, ↻ OFF

❺ Karaoke mode display section
VR, MONO R, MONO L

❻ Key control display section
♭——— ♮ ———♯

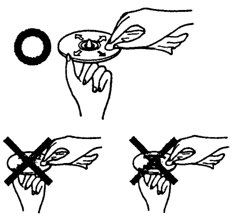
- The TV screen display can only be used with video CDs.

10 AUTO ON FUNCTION

- When the play button or ≜OPEN/CLOSE button on the CD auto changer, cassette deck (optional) or MD recorder (optional) is pressed while the power is set to the standby mode, the power automatically turns on and the play or open / close operation is performed.
- In the same way, when the tuner–amplifier's preset up / down buttons on the remote control unit is pressed, the power turns on and the corresponding station is tuned in.

11 OTHER INFORMATION

Cleaning Discs



Dust, fingerprints or spit on the disc will result in noise or skipping. If the disc is dirty or if the CD auto changer does not operate properly, use the following procedure to clean the disc:

- Hold the disc with the signal surface (the side opposite the labelled side) facing up, as shown in the diagram.
- Wipe the disc gently from the center towards the edge (in the direction of the arrow) with a soft cloth.

Do not clean discs with the following:

- Benzene, alcohol or other solvents
- Cleaner including an abrasive
- Sprays or cleaners designed for records
- Anti–static

NOTES

- Do not wipe discs in the direction opposite the arrow or in a circular motion as with regular records.
- The disc's signal surface is easily damaged, so do not wipe it with a hard cloth or rub it strongly.

12 SPECIFICATIONS

■Tuner–amplifier (UDRA–M7)	
Reception frequency band:	FM: 87.50 MHz – 108.00 MHz AM: 522 kHz – 1611 kHz
Reception sensitivity:	FM: 1.5 μV / 75 Ω / ohms AM: 20 μV
FM stereo separation:	35 dB (1 kHz)
Rated output power:	30 W + 30 W (6 Ω / ohms, DIN)
Low frequency adjustment range:	100 Hz ±8 dB
High frequency adjustment range:	10 kHz ±8 dB
Audio input / output jacks:	CD input jacks, tape input / output jacks, AUX. input jacks, MD input / output jacks, 3.5 mm headphones jack
Power supply:	AC 230 V, 50 Hz
Power consumption:	65 W
Maximum external dimensions:	210 (W) × 95 (H) × 323 (D) mm (8–17/64" × 3–45 / 64" × 12–7 / 8") (including feet, controls and terminals)
Weight:	3.5 kg (7 lbs. 11 oz)
■CD auto changer (UDCM–M7)	
Wow & flutter:	Below measurable limits (±0.001% W. peak)
Sampling frequency:	44.1 kHz
Optical source:	Semiconductor
Power supply:	AC 230 V, 50 Hz
Power consumption:	12 W
Maximum external dimensions:	210 (W) × 97 (H) × 343 (D) mm (8–17/64" × 3–45 / 64" × 13–5 / 16") (including feet, controls and terminals)
Weight:	3.0 kg (6 lbs. 13 oz)
■Remote control unit (RC–831)	
Remote control system:	Infrared pulse
Number of buttons:	47
Power supply:	Two DC 1.5V R6P / AA batteries
Maximum external dimensions:	67 (W) × 197 (H) × 21 (D) mm (2–41/64" × 7–3 / 4" × 53 / 64")
Weight:	145 g (including batteries) (Approx. 4.6 oz)

- Maximum dimensions include controls, jacks, and covers.
(W) = width, (H) = height, (D) = depth
- For improvement purposes, specifications and functions are subject to change without advanced notice.

13 TROUBLESHOOTING

Check the following once more before assuming there is a problem with the system.
1. Are connections proper?
2. Is the system being operated as explained in the operating instructions?

If the system does not seem to be operating properly, check as shown on the table below. If none of these checks apply to the problem, the system may be malfunctioning. Disconnect the power cord immediately and contact your store of purchase.

	Symptom	Cause	Countermeasure	Page
General	Power does not turn on when power operation switch is pressed.	• Power cord is not plugged into a power outlet.	• Plug the power cord securely into an outlet.	5
	No sound is produced from the speakers.	• VOLUME control is turned down. • Headphones are connected. • Speaker cords are not securely connected.	• Set the control to an appropriate position. • Disconnect the headphones. • Connect securely.	6 6 5
	No treble sound is produced, or the position of the instruments is unclear.	• Speaker polarities (⊕ and ⊖) are inverted.	• Connect the speaker cords properly.	5
	A source other than the desired one is heard.	• Function is not properly set.	• Set the desired function using the FUNCTION button.	6
Tuner–amplifier	Hissing sound is heard in FM programs.	• Antenna direction is poor. • Signals from the broadcast station are weak.	• Change the direction of the antenna. • Install an outdoor antenna.	4 4
	Hissing sound is heard in AM programs.	• Noise from a TV or interference from a broadcast station.	• Turn the TV off. • Change the direction of the loop antenna. • Install an outdoor antenna.	– – 4
	Humming sound is heard in AM programs.	• Signals on the power cord are being modulated by the power source frequency	• Insert the power cord in the opposite direction. • Install an outdoor antenna.	– 4
CD auto changer	Total number of tracks not displayed when disc is loaded.	• Disc is loaded upside–down. • Disc is dirty. • Disc is not of the specified type.	• Reload the disc. • Clean the disc. • Replace with a disc of the specified type.	16 20 –
	Nothing happens when operating buttons are pressed. Disc stops in the middle of a track and will not play properly.	• Disc is loaded upside–down. • Foreign object on disc tray. • Disc is dirty. • Disc is scratched.	• Reload the disc. • Remove the disc and the foreign object. • Clean the disc. • Replace with an unscratched disc.	16 16 20 –
	Sound is broken.	• Dirt, fingerprints, spittle, etc. on disc. • Disc is scratched. • Player is in an unstable place and vibrates strongly	• Clean the disc. • Replace with an unscratched disc. • Place the player in a stable place with no vibrations.	20 – –
	Humming sound is heard when disc is played	• Signals on the power cord are being modulated by the power source frequency.	• Insert the power cord in the opposite direction.	–

• Protector circuit

The UDRA–M7 is equipped with a high speed protector circuit.

This circuit protects internal parts from being damaged by strong currents generated in the set should the set be operated when the speaker terminals are incompletely connected or short–circuited.

If this protector circuit is activated, a relay sound is produced, the output to the speakers is interrupted, and the function and power LEDs flash to indicate that there is a problem. If this should happen, unplug the power cord, check the speaker connections, then plug in the power cord and turn the power back on. After several seconds, a relay sound is heard and the set starts operating properly

- The set may not operate properly due to such external influences as lightning or static electricity. If this happens, either turn off the power with the tuner–amplifier's POWER operation switch or unplug the power cord, wait approximately 5 seconds, then plug the power cord back in

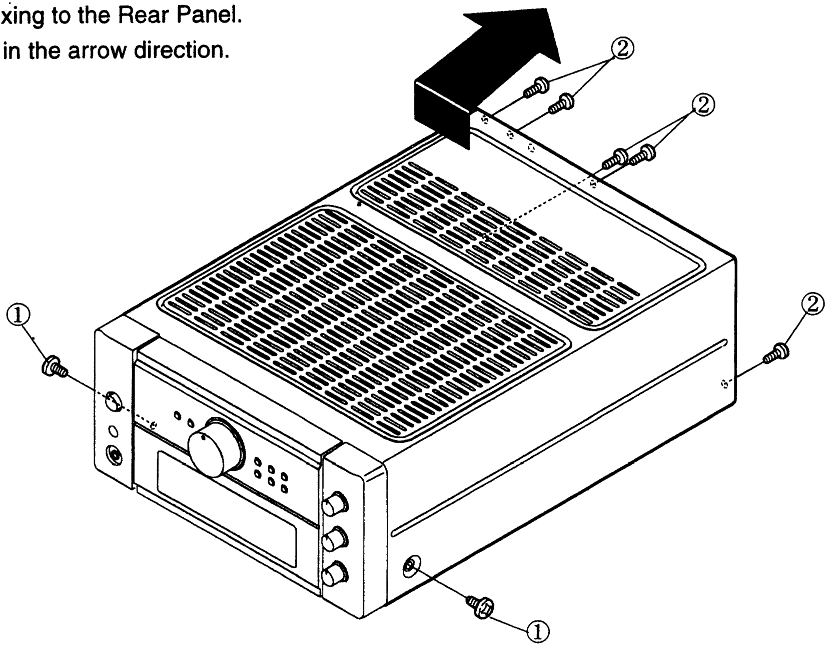
RECEIVER SECTION

DISASSEMBLY

(Follow in the reverse order for reassembly)

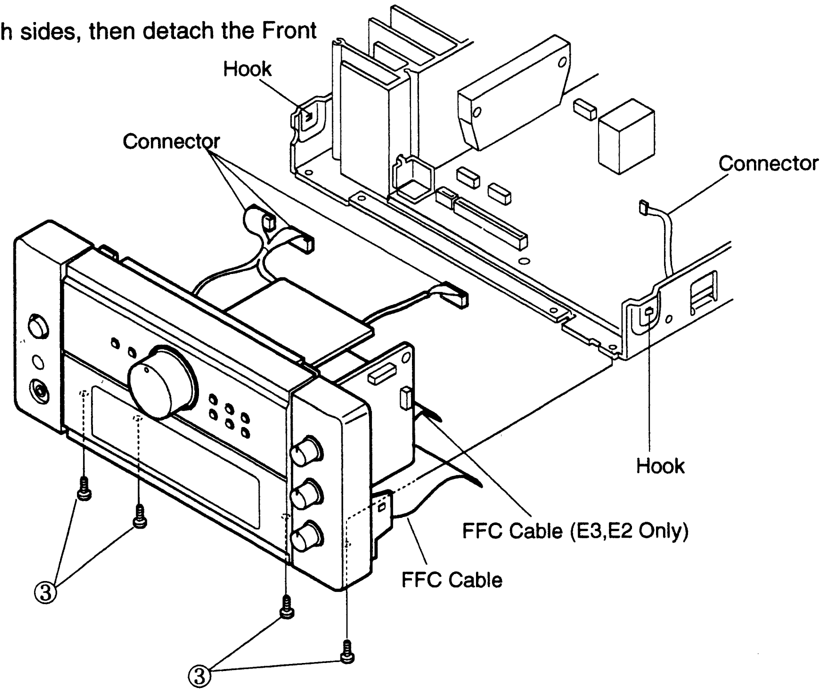
1. Top Cover

(1) Remove 2 screws ① fixing from the both sides.
(2) Remove 5 screws ② fixing to the Rear Panel.
(3) Detach the Top Cover in the arrow direction.



2. Front Panel

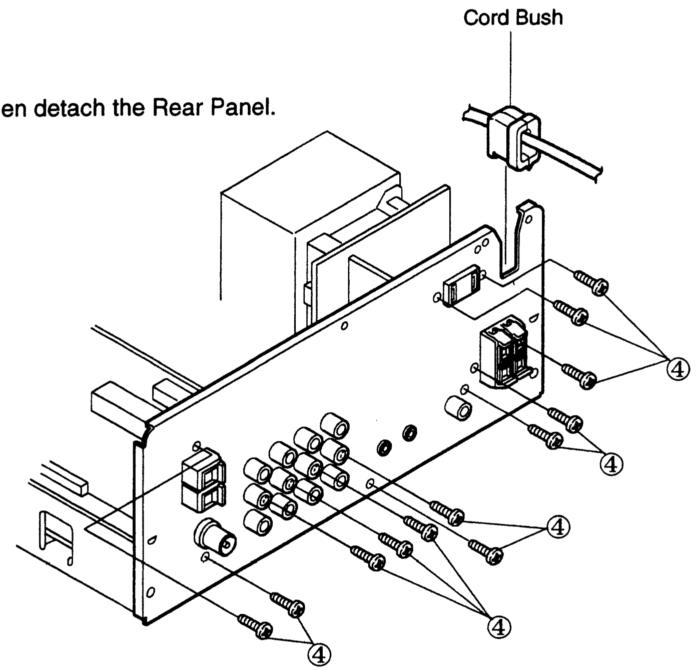
(1) Remove 4 screws ③ fixing the Front Panel at the bottom.
(2) Disconnect 3 connectors coming from the Front P.W.B. and 1 connector coming from the Main P.W.B.
(3) Disconnect 2 (1 : for Asia model) FFC cables from the Main P.W.B.
(4) Release 2 hooks at the both sides, then detach the Front Panel.


Hook
Connector
Connector
Hook
FFC Cable (E3,E2 Only)
FFC Cable
③
③

3. Rear Panel

(1) Remove the Cord Bush.

(2) Remove 12 screws ④, then detach the Rear Panel.



4. Main P.W.Board

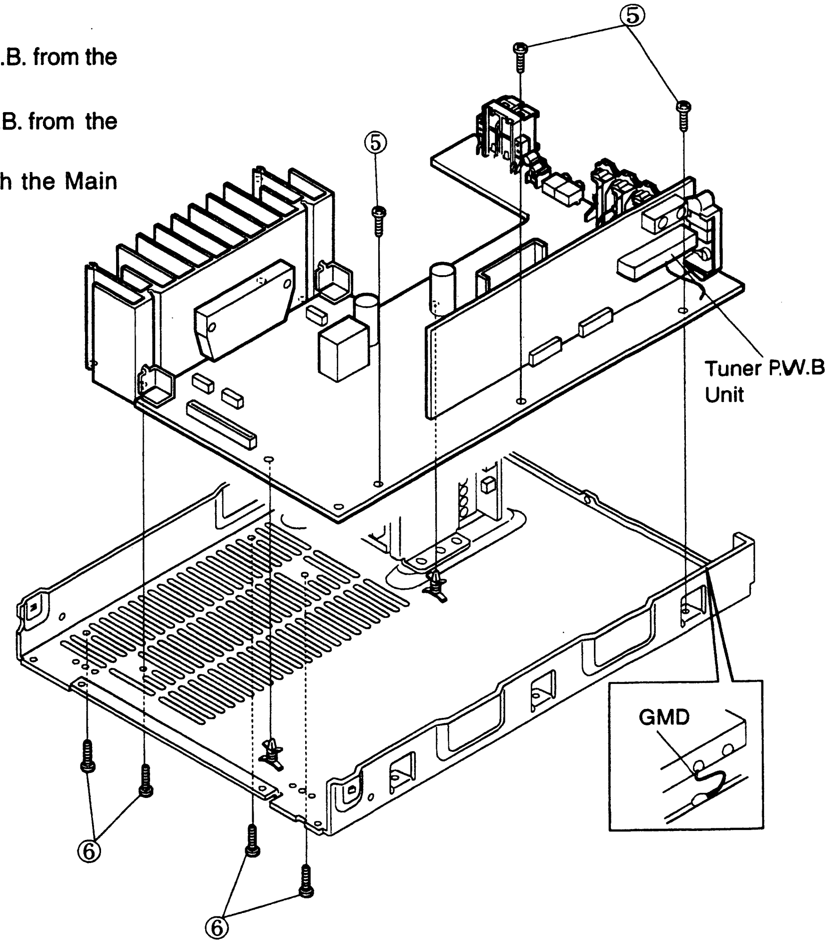
(1) Disconnect soldered wire.

(2) Detach the Tuner P.W.B. from the Main P.W.B. (for Europe, U.K. models)

(3) Remove 3 screws ⑤ fixing the Main P.W.B. from the top.

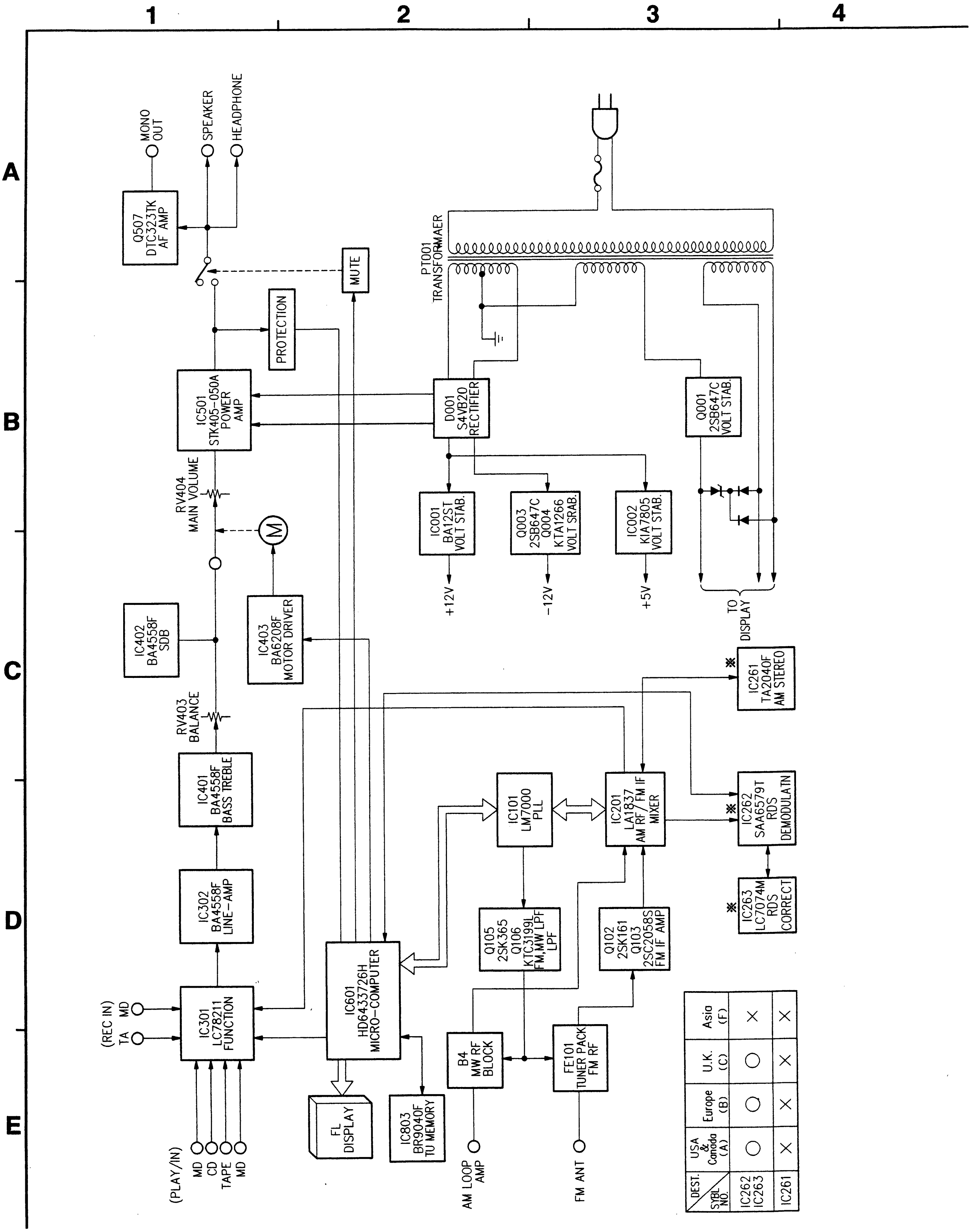
(4) Remove 4 screws ⑥ fixing the Main P.W.B. from the bottom.

(5) Release 2 P.W.B. holders, then detach the Main P.W.B.



RECEIVER SECTION

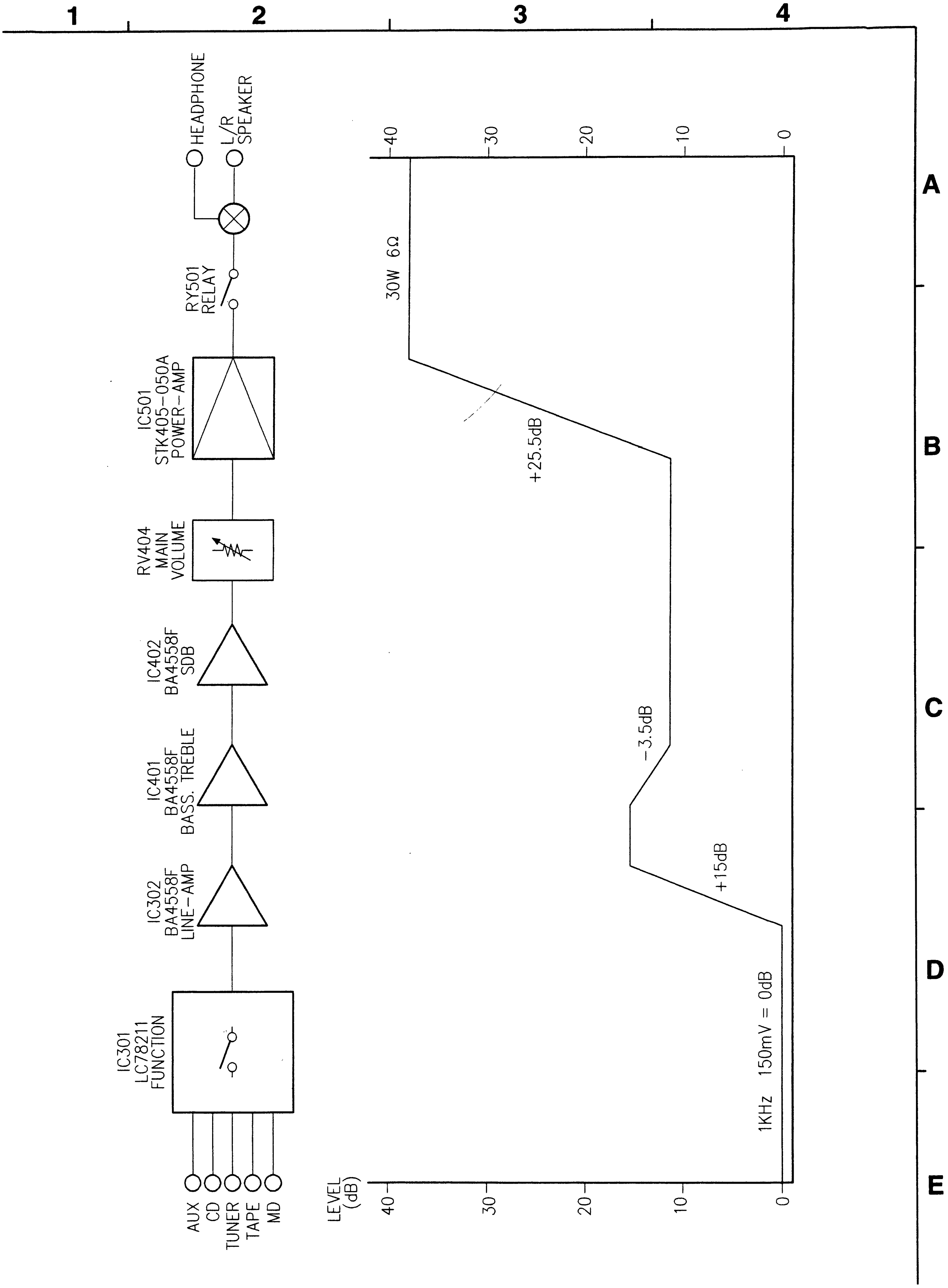
BLOCK DIAGRAM


1
2
3
4
A
B
C
D
E
MONO OUT
SPEAKER
HEADPHONE
Q507 DTC323TK AF AMP
MUTE
PROTECTION
PT001 TRANSFORMAER
IC501 STK405-050A POWER AMP
D001 S4VB20 RECTIFIER
Q001 2SB647C VOLT STAB.
RV404 MAIN VOLUME
M
IC001 BA12ST VOLT STAB.
Q003 2SB647C Q004 KTA1266 VOLT SRAB.
IC002 KIA7805 VOLT STAB.
+12V
−12V
+5V
TO DISPLAY
IC402 BA4558F SDB
IC403 BA6208F MOTOR DRIVER
※ IC261 TA2040F AM STEREO
RV403 BALANCE
IC401 BA4558F BASS TREBLE
IC101 LM7000 PLL
IC201 LA1837 AM RF/FM IF MIXER
※ IC262 SAA6579T RDS DEMODULATN
IC302 BA4558F LINE-AMP
Q105 2SK365 Q106 KTC3199L FM,MW LPF LPF
Q102 2SK161 Q103 2SC2058S FM IF AMP
※ IC263 LC7074M RDS CORRECT
(REC IN) TA MD
IC301 LC78211 FUNCTION
IC601 HD6433726H MICRO-COMPUTER
B4 MW RF BLOCK
FE101 TUNER PACK FM RF
FL DISPLAY
IC803 BR9040F TU MEMORY
(PLAY/IN) MD CD TAPE MD
AM LOOP AMP
FM ANT

DEST. / SYBL NO.	USA & Canada (A)	Europe (B)	U.K. (C)	Asia (F)
IC262 IC263	○	○	○	×
IC261	×	×	×	×

BLOCK LEVEL DIAGRAM

RECEIVER SECTION


1
2
3
4
A
B
C
D
E
AUX
CD
TUNER
TAPE
MD
IC301
LC78211
FUNCTION
IC302
BA4558F
LINE-AMP
IC401
BA4558F
BASS. TREBLE
IC402
BA4558F
SDB
RV404
MAIN
VOLUME
IC501
STK405-050A
POWER-AMP
RY501
RELAY
HEADPHONE
L/R
SPEAKER
LEVEL
(dB)
40
30
20
10
0
1KHz 150mV = 0dB
+15dB
-3.5dB
+25.5dB
30W 6Ω

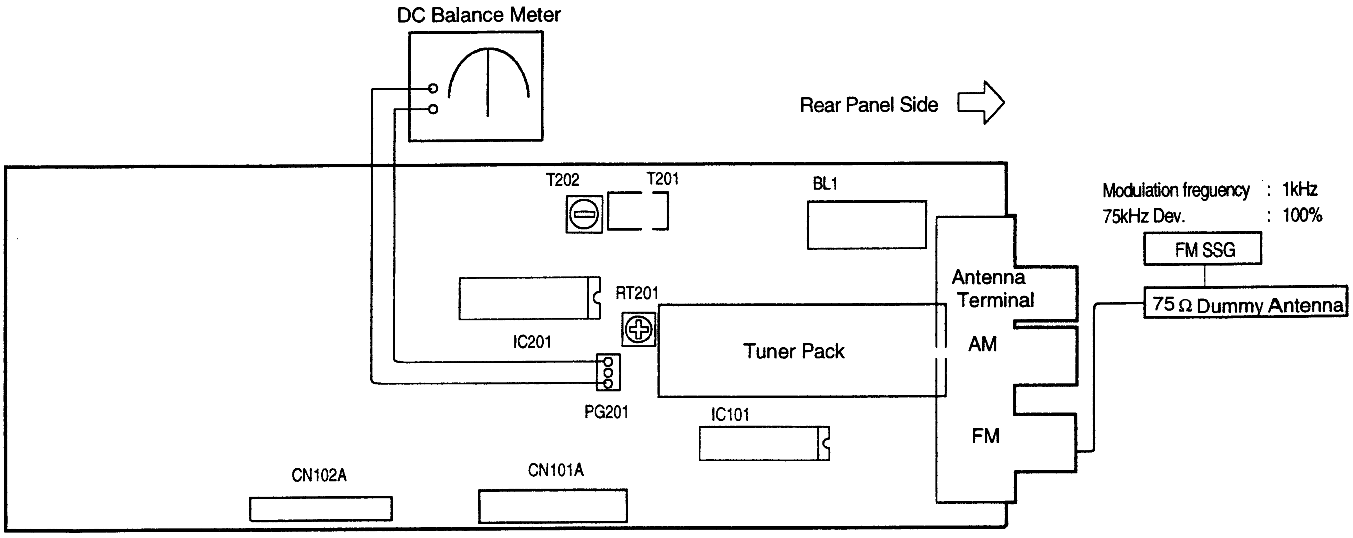
RECEIVER SECTION

ADJUSTMENT

TUNER ALIGNMENT(BAND BUTTON : FM, MONO/AUTO BUTTON : AUTO)

Step	Alignment Item	Tuning Frequency Setting	Input					Output		Adjustment		Remarks
			Instrument	Frequency	Input level	Modulation	Connection	Type	Connect to	Points	Adjust to	
1	FM DC BALANCE	83 MHz	FM S.G.	83 MHz	60 dBμ	1kHz 75kHz DEV	FM Antenna Terminal	DC Balance Meter	⊕PG201 ⊖PG201	T202	0±30mV	Monaural Modulation
2	MUTING LEVEL	83 MHz	FM S.G.	83 MHz	22 dBμ	1kHz 75kHz DEV	FM Antenna Terminal	TUNED Lighting Cheek	Output Terminal	RT201	Input Level 22dBμ±4dB	Output signal appearing level

CONNECTION / ALIGNMENT POINTS (Component Side)

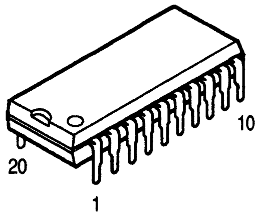

DC Balance Meter
Rear Panel Side
T202
T201
BL1
Modulation freguency : 1kHz
75kHz Dev. : 100%
FM SSG
Antenna Terminal
75 Ω Dummy Antenna
RT201
IC201
Tuner Pack
AM
PG201
IC101
FM
CN102A
CN101A

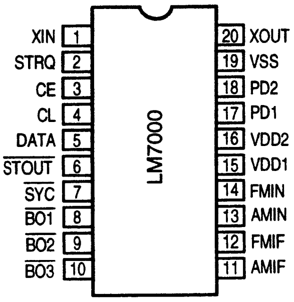
TUNER P.W.B.

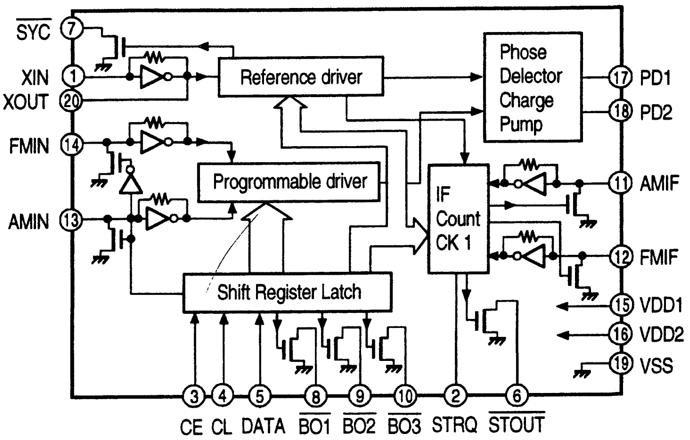
SEMICONDUCTORS

● IC's

LM7000 (IC101)



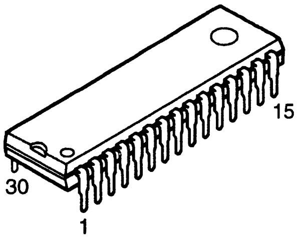

XIN 1
STRQ 2
CE 3
CL 4
DATA 5
STOUT 6
SYC 7
BO1 8
BO2 9
BO3 10
LM7000
20 XOUT
19 VSS
18 PD2
17 PD1
16 VDD2
15 VDD1
14 FMIN
13 AMIN
12 FMIF
11 AMIF

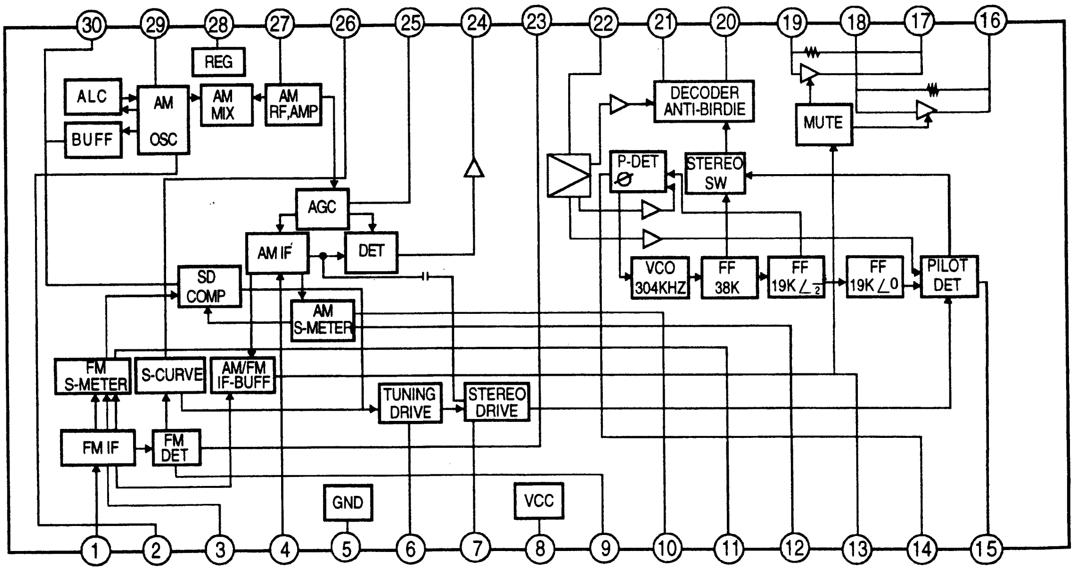

SYC 7
XIN 1
XOUT 20
FMIN 14
AMIN 13
Reference driver
Programmable driver
Shift Register Latch
Phose Delector Charge Pump
IF Count CK 1
17 PD1
18 PD2
11 AMIF
12 FMIF
15 VDD1
16 VDD2
19 VSS
3 4 5 8 9 10 2 6
CE CL DATA BO1 BO2 BO3 STRQ STOUT

Pin Description

$\overline{\text{SYC}}$	: Clock (400kHz) for the controller
XIN、XOUT	: X'tal oscillator (7.2MHz) with built-in
FM IN、AM IN	: freeback resistor
CE、CL、DATA	: Data input
$\overline{\text{B01}}$、$\overline{\text{B02}}$、$\overline{\text{B03}}$	: Band data output. $\overline{\text{B01}}$ can be set as the time base output (8Hz)
STRQ	: IF counter request input
$\overline{\text{STOUT}}$	: Auto research stop signal output
VDD1、VDD2、VVS	: Power supply (VDD2 is a back-up power supply)
AMIF、FMIF	: IF counter request input
PD1、PD2	: Charge pump output

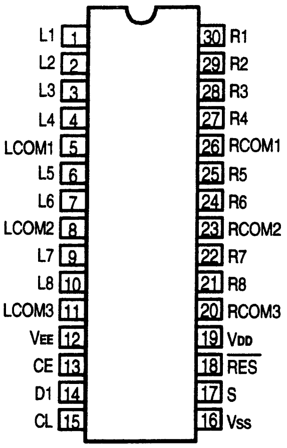
LA1837 (IC201)

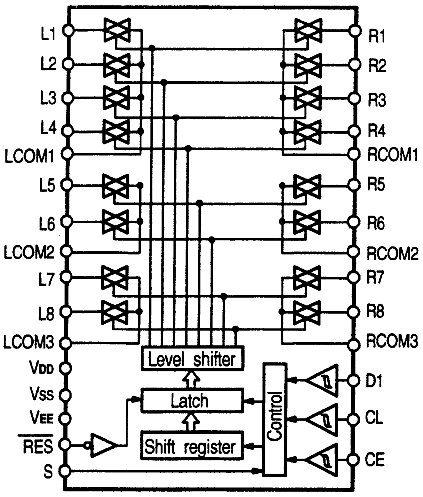



30 29 28 27 26 25 24 23 22 21 20 19 18 17 16
REG
ALC
AM OSC
AM MIX
AM RF.AMP
BUFF
DECODER ANTI-BIRDIE
MUTE
AGC
AM IF
DET
SD COMP
AM S-METER
P-DET
STEREO SW
VCO 304KHZ
FF 38K
FF 19K∠π/2
FF 19K∠0
PILOT DET
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
FM DET
GND
VCC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

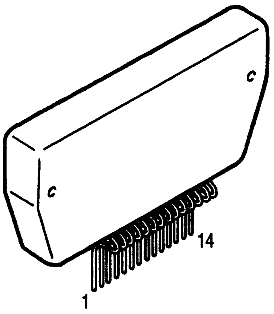
RECEIVER SECTION

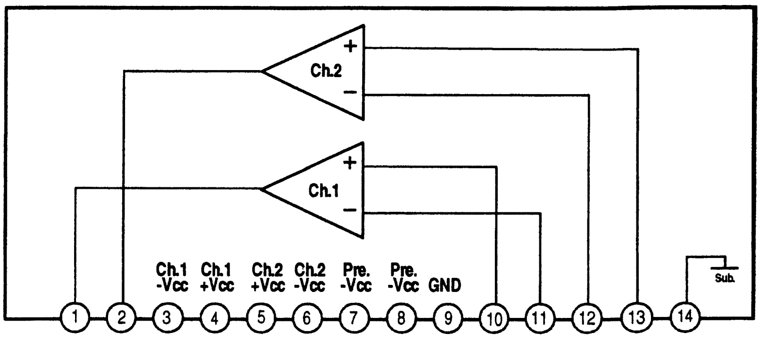
LC78211 (IC301)


L1 1
L2 2
L3 3
L4 4
LCOM1 5
L5 6
L6 7
LCOM2 8
L7 9
L8 10
LCOM3 11
VEE 12
CE 13
D1 14
CL 15
30 R1
29 R2
28 R3
27 R4
26 RCOM1
25 R5
24 R6
23 RCOM2
22 R7
21 R8
20 RCOM3
19 VDD
18 RES
17 S
16 Vss

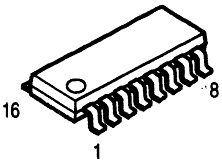

L1
L2
L3
L4
LCOM1
L5
L6
LCOM2
L7
L8
LCOM3
VDD
Vss
VEE
RES
S
R1
R2
R3
R4
RCOM1
R5
R6
RCOM2
R7
R8
RCOM3
D1
CL
CE
Level shifter
Latch
Shift register
Control

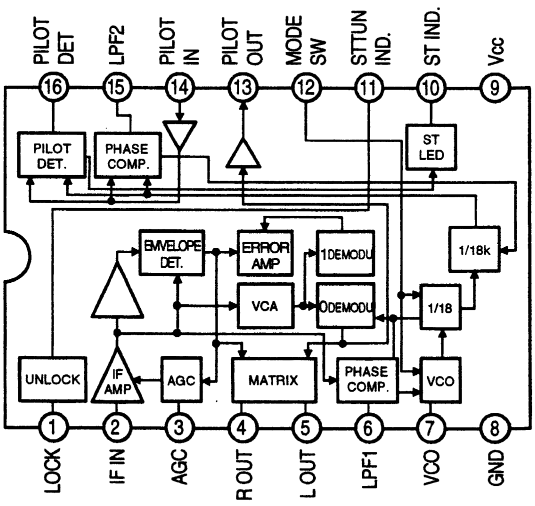
STK405-050A (IC501)



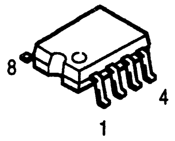

Ch.2
Ch.1
+
−
Ch.1 -Vcc
Ch.1 +Vcc
Ch.2 +Vcc
Ch.2 -Vcc
Pre. -Vcc
Pre. -Vcc
GND
Sub.
1
2
3
4
5
6
7
8
9
10
11
12
13
14

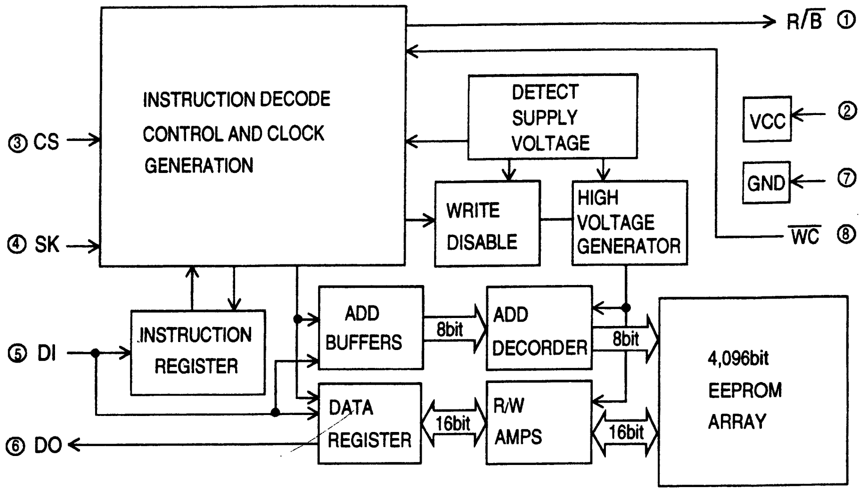
TA2040AF (IC261)



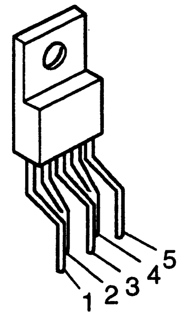

PILOT DET
LPF2
PILOT IN
PILOT OUT
MODE SW
STTUN IND.
ST IND.
Vcc
16
15
14
13
12
11
10
9
PILOT DET.
PHASE COMP.
ST LED
1/18k
ENVELOPE DET.
ERROR AMP
1DEMODU
VCA
0DEMODU
1/18
UNLOCK
IF AMP
AGC
MATRIX
PHASE COMP.
VCO
1
2
3
4
5
6
7
8
LOCK
IF IN
AGC
R OUT
L OUT
LPF1
VCO
GND

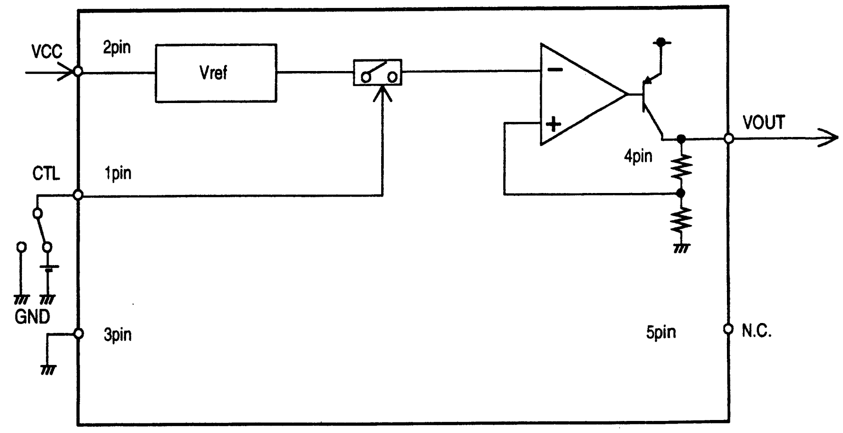
BR9040F (IC603)



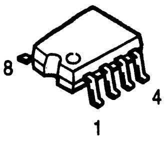

INSTRUCTION DECODE
CONTROL AND CLOCK
GENERATION
③ CS
④ SK
⑤ DI
⑥ DO
R/$\overline{B}$ ①
VCC
②
GND
⑦
$\overline{WC}$ ⑧
DETECT
SUPPLY
VOLTAGE
WRITE
DISABLE
HIGH
VOLTAGE
GENERATOR
INSTRUCTION
REGISTER
ADD
BUFFERS
8bit
ADD
DECORDER
8bit
DATA
REGISTER
16bit
R/W
AMPS
16bit
4,096bit
EEPROM
ARRAY

BA12ST-V5 (IC001)



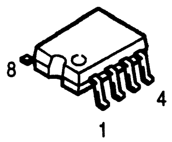

VCC
2pin
Vref
CTL
1pin
GND
3pin
VOUT
4pin
5pin
N.C.

BA6208F (IC403)



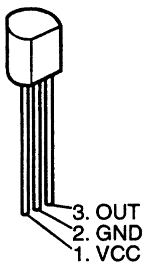
1: VCC
2: BOUT
3: GND
4: AOUT
5: BIN
6: VCT
7: GND
8: AIN

BA4558F (IC302)

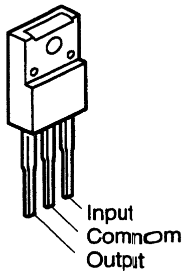


1: AOUT
2: AIN1
3: AIN2
4: VEE
5: BIN2
6: BIN1
7: BOUT
8: VCC

KIA7045P (IC602)

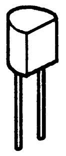

3. OUT
2. GND
1. VCC

KIA7805PI (IC002)


Input
Commom
Output

●IC PROTECTOR

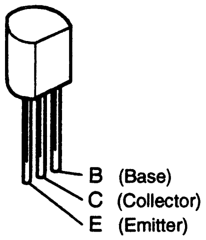
ICP-N5 (PR001,002,003,201)



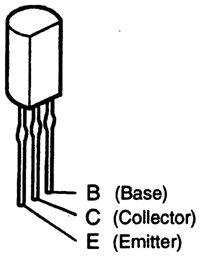
RECEIVER SECTION

●TRANSISTOR

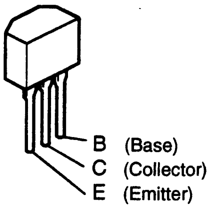
KTC3202
HIT8050C


B (Base)
C (Collector)
E (Emitter)

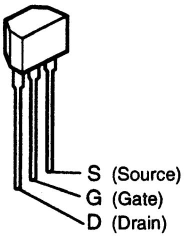
2SB647 (C)


B (Base)
C (Collector)
E (Emitter)

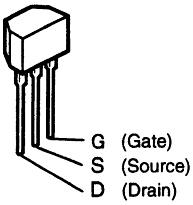
KTC3199
KTC3199L
KTA1267


B (Base)
C (Collector)
E (Emitter)

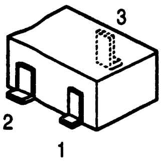
2SK365 (BL/GR)


S (Source)
G (Gate)
D (Drain)

2SK161

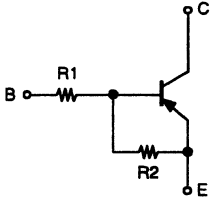

G (Gate)
S (Source)
D (Drain)

DTA114EK
DTC114EK
DTA144EK
DTC144EK
DTC323EK



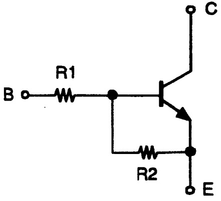
1: GND/Emitter
2: IN/Base
3: OUT/Emitter

PNP Type



	R1	R2
DTA114EK	10 kohm	10 kohm
DTA144EK	47 kohm	47 kohm

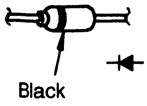
NPN Type



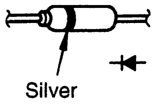
	R1	R2
DTC144EK	47 kohm	47 kohm
DTC323TK	2.2 kohm	—
DTC114EK	10 kohm	10 kohm

●DIODE (Including LED)

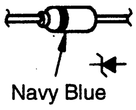
IN4531/1SS133



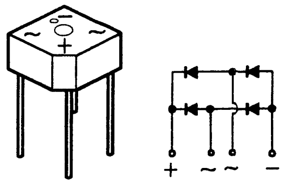
IN4002



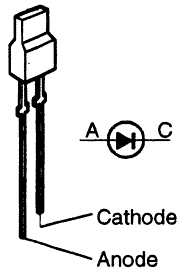
MTZ-J12C
MTZ-J5.6A
MTZ-J27A
MTZ-J6.2A
MTZ-J10A



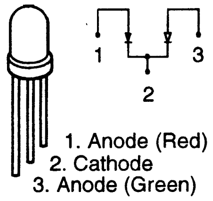
S4VB20



RLL-20503PD-R15S

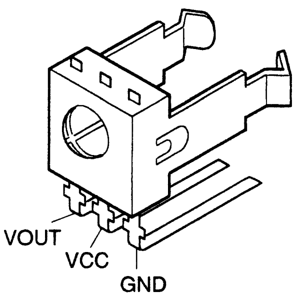

A
C
Cathode
Anode

SPR-505MVW


1
3
2
1. Anode (Red)
2. Cathode
3. Anode (Green)

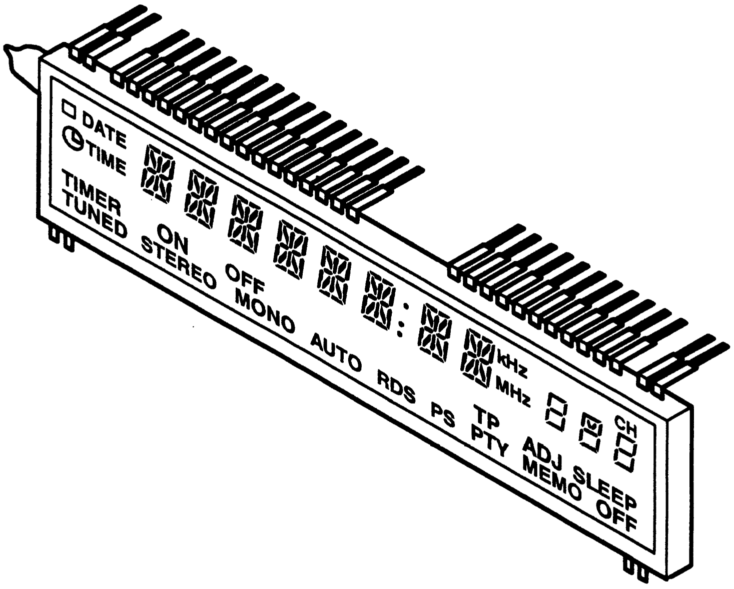
●REMOTE CONTROL SENSOR

PIC-21043TH2


VOUT
VCC
GND

RECEIVER SECTION

● FL DISPLAY 11BT27GK (FL601)
(Parts No. : KDD00061)


DATE
TIME
TIMER
TUNED
ON
STEREO
OFF
MONO
AUTO
RDS
PS
TP
PTY
kHz
MHz
ADJ
MEMO
SLEEP
OFF
CH

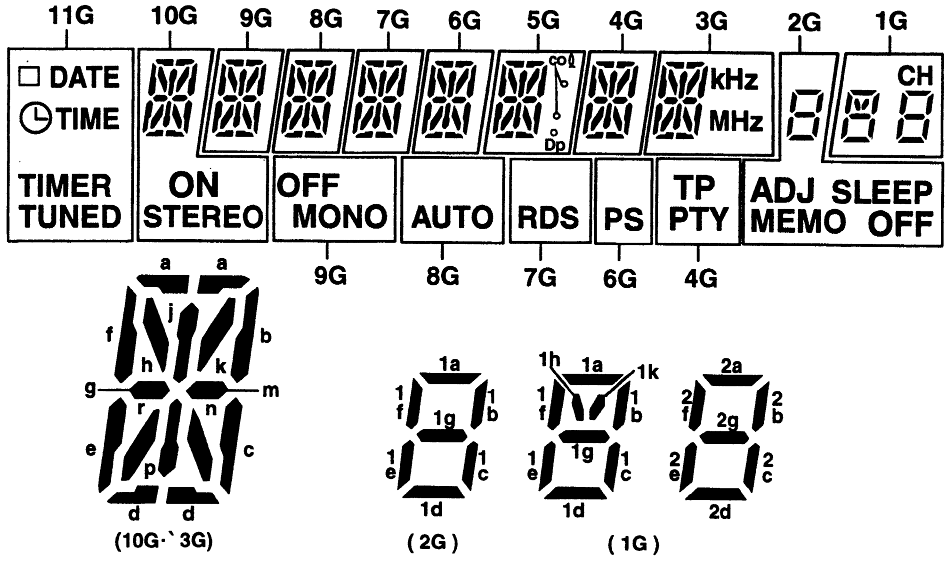
Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Connection	F1	F1	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	NX	NX	NX	NX

Pin No.	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Connection	NX	NX	NX	NX	NX	NX	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F2	F2

NOTE
1) F1,F2 ············ Filament
2) NP················· No Pin
3) NC················· No Extension Pin
4) DL ············ Datum Line
5) 1G~11G··········· Grid
6) Visible Angle (Min) = 33° (Upper), 25° (Lower)

Grid Partition


11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
□ DATE
◷TIME
col
Dp
kHz
MHz
CH
TIMER
TUNED
ON
STEREO
OFF
MONO
AUTO
RDS
PS
TP
PTY
ADJ SLEEP
MEMO OFF
a
b
c
d
e
f
g
h
j
k
m
n
p
r
(10G~3G)
1a
1b
1c
1d
1e
1f
1g
1h
1k
2a
2b
2c
2d
2e
2f
2g
(2G)
(1G)

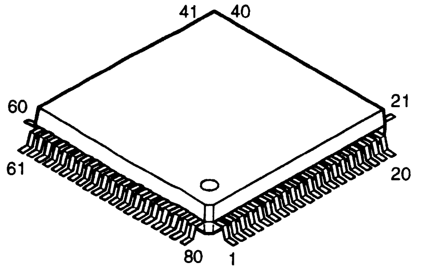
Anode Connection

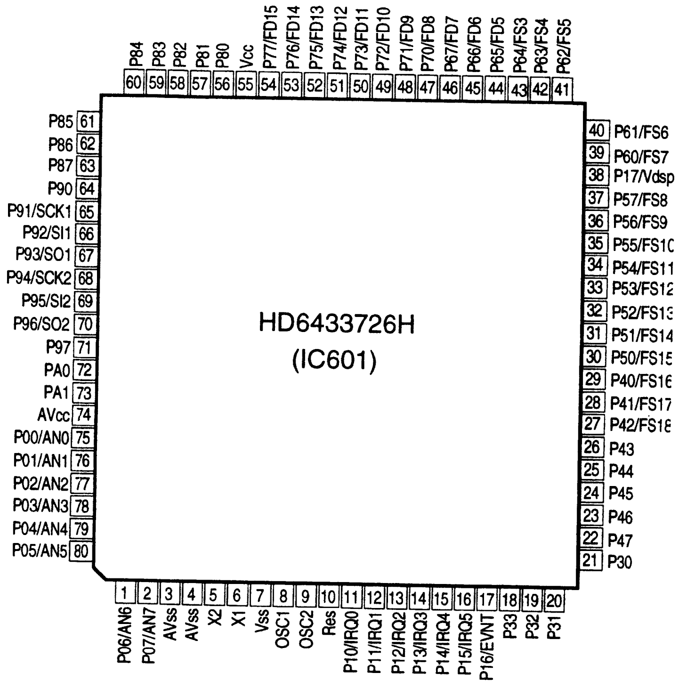
	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	□	a	a	a	a	a	a	a	a	1a	1a
P2	◷	b	b	b	b	b	b	b	b	1b	1b
P3	**DATE**	c	c	c	c	c	c	c	c	1c	1c
P4	**TIME**	d	d	d	d	d	d	d	d	1d	1d
P5	**TIMER**	e	e	e	e	e	e	e	e	1e	1e
P6	**TUNED**	f	f	f	f	f	f	f	f	1f	1f
P7	–	g	g	g	g	g	g	g	g	1g	1g
P8	–	h	h	h	h	h	h	h	h	**ADJ**	1h,1k
P9	–	j	j	j	j	j	j	j	j	**MEMO**	2a
p10	–	k	k	k	k	k	k	k	k	**SLEEP**	2b
P11	–	m	m	m	m	m	m	m	m	**OFF**	2c
P12	–	n	n	n	n	n	n	n	n	–	2d
P13	–	p	p	p	p	p	p	p	p	–	2e
P14	–	r	r	r	r	r	r	r	r	–	2f
P15	–	**ON**	**OFF**	**AUTO**	**RDS**	**PS**	coℓ	**TP**	**kHz**	–	2g
P16	–	**STEREO**	**MONO**	–	–	–	Dp	**PTY**	**MHz**	–	**CH**

RECEIVER SECTION

MICROPROCESSOR DOCUMENTATION

HD6433726H (IC601)


41
40
60
21
61
20
80
1


HD6433726H
(IC601)
1 P06/AN6
2 P07/AN7
3 AVss
4 AVss
5 X2
6 X1
7 Vss
8 OSC1
9 OSC2
10 Res
11 P10/IRQ0
12 P11/IRQ1
13 P12/IRQ2
14 P13/IRQ3
15 P14/IRQ4
16 P15/IRQ5
17 P16/EVNT
18 P33
19 P32
20 P31
21 P30
22 P47
23 P46
24 P45
25 P44
26 P43
27 P42/FS18
28 P41/FS17
29 P40/FS16
30 P50/FS15
31 P51/FS14
32 P52/FS13
33 P53/FS12
34 P54/FS11
35 P55/FS10
36 P56/FS9
37 P57/FS8
38 P17/Vdsp
39 P60/FS7
40 P61/FS6
41 P62/FS5
42 P63/FS4
43 P64/FS3
44 P65/FD5
45 P66/FD6
46 P67/FD7
47 P70/FD8
48 P71/FD9
49 P72/FD10
50 P73/FD11
51 P74/FD12
52 P75/FD13
53 P76/FD14
54 P77/FD15
55 Vcc
56 P80
57 P81
58 P82
59 P83
60 P84
61 P85
62 P86
63 P87
64 P90
65 P91/SCK1
66 P92/SI1
67 P93/SO1
68 P94/SCK2
69 P95/SI2
70 P96/SO2
71 P97
72 PA0
73 PA1
74 AVcc
75 P00/AN0
76 P01/AN1
77 P02/AN2
78 P03/AN3
79 P04/AN4
80 P05/AN5

1. Overview

The functions of this microcomputer are made up of the following four pillars.

a. Tuner functions

These function perform the required control for the reception of FM and AM broadcasts.

b. Auto functions

Positioned at the heart of the system stereo, the auto functions perform serial communications with other components [such as the Deck (UDR-F10), and (UDCM-F10)] to provide overall control.

These functions decode the signals from the remote control and send them to each component of the system. These functions perform two types of timer operations, "everyday and sleep."

c. Timer functions

Counts the clock of the 12-hour display.

Provides 2 types of timer operation : once and sleep.

d. Display Function

Outputs the control signal of the FLD.

NOTE1 When buttons "STANDBY" and "MEMORY" are pressed simutaneously and the power or is inserted into the power outlet , the frequencies used for the tracking adjustment will automatically be registerd in the preset memory as indicated below.
Use this information for tuning and other procedures

	P1	P2	P3	P4	P5
AM (kHz)	520	600	1000	1400	1710
	P11	P12	P13	P14	P15
FM (MHz)	87.5	89.0	98.0	100.1	108.0

* P6 through P10 and P21 through P40 are AM 520 kHz, and P16 through P20 are FM 87.5 MHz.

NOTE2 Depressing both the MEORY and BAND buttons while plugging the power cord into the power outlet serves to initialize the current time setting and the contents of the timer and preset memory.

2. Receiving Band Table

Band	Receiving frequency	Local oscillator frequency	IF	Frequency division ratio	Comparison frequency	Step frequency	Other
FM	87.5 ~ 108.0MHz	98.2 ~ 118.7MHz	10.7MHz	1	25kHz	100kHz	STEREO
AM	520 ~ 1710kHz	970 ~ 2160kHz	450kHz	—	10kHz	10kHz	

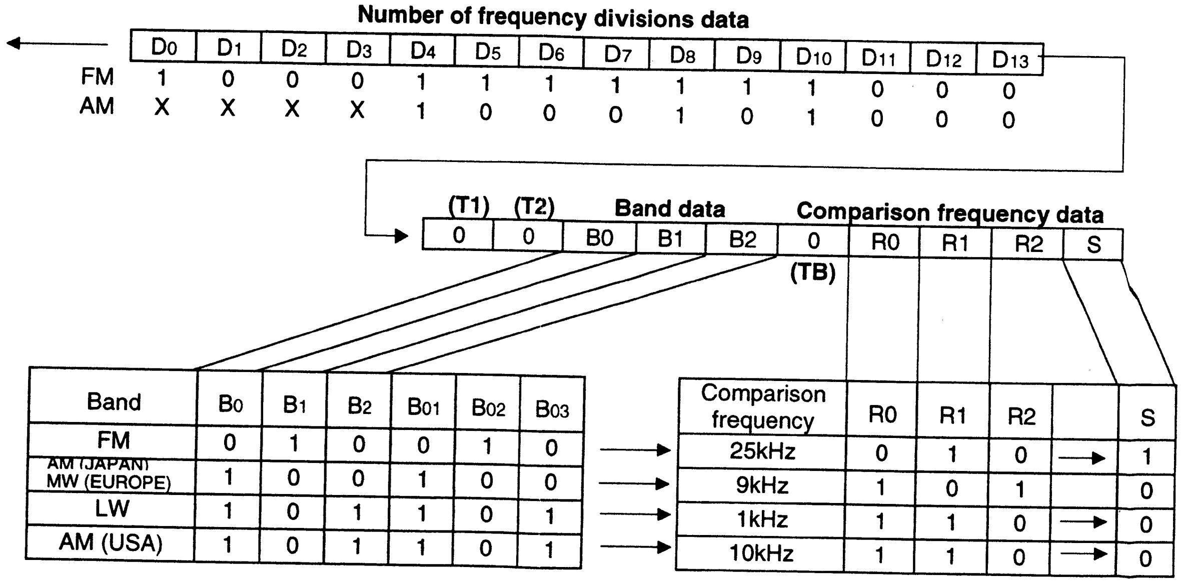
3. Signals sent to the LM7000 Programmable Divider

a. Signals to the programmable divider are sent from 3 sources: CE OUT, CLOCK OUT, and DATA OUT.

b. The programmable divider takes in DATA at CLOCK ⮥ , when CE equals 1.

c. The data is a 24-bit serial signal which is taken in to the programmable divider from the LSB.
(At the AM setting, D_0 through D_3 are ignored, so that D_4 becomes the LSB.)

d. The data is made up of the number of frequency divisions data, the band data, and the comparison frequency data.
(See diagram below.)


Number of frequency divisions data
(T1)
(T2)
Band data
Comparison frequency data
(TB)

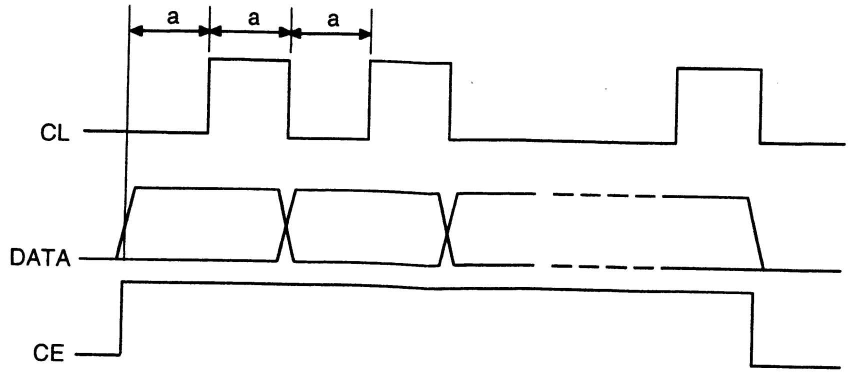
	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13
FM	1	0	0	0	1	1	1	1	1	1	1	0	0	0
AM	X	X	X	X	1	0	0	0	1	0	1	0	0	0

(T1)	(T2)	Band data			Comparison frequency data				
0	0	B0	B1	B2	0 (TB)	R0	R1	R2	S

Band	B0	B1	B2	B01	B02	B03
FM	0	1	0	0	1	0
AM (JAPAN) MW (EUROPE)	1	0	0	1	0	0
LW	1	0	1	1	0	1
AM (USA)	1	0	1	1	0	1

Comparison frequency	R0	R1	R2		S
25kHz	0	1	0	→	1
9kHz	1	0	1		0
1kHz	1	1	0	→	0
10kHz	1	1	0	→	0

e. Timing for sending
a = 2.5 µsec


a
a
a
CL
DATA
CE

HD6433726A76H Terminal Function

Pin No.	Symbol	Port Name	I/O	INI	ACT	Function
1	AM Stereo	P60/AN6	I	–	L	AM stereo signal detection.
2	Tuned In	P07/AN7	I	L	H	– FM/AM tuning signal input.
3	GND	AVss	–	–	–	Analog ground.
4	GND	Test	–	–	–	
5	Sub Xtal	X2	O	–	–	Sub Xtal drive.
6	Sub Xtal	X1	I	–	–	Sub Xtal input.
7	Vss	Vss	–	–	–	Ground.
8	OSC1	OSC1	O	–	–	8.38 MHz Xtal out.
9	OSC2	OSC2	I	–	–	8.38 MHz Xtal in.
10	Reset	Res	I	–	L	Reset input.
11	Remocon	P10/IRQ0	I	–	L	Remote control signal in.
12	50/60	P11/IRQ1	I	–	L	50/60 Hz AC input.
13	Protect	P12/IRQ2	I	–	L	Overcurrent detection signal input.
14	RDS Start	P13/IRQ3	I	–	L	RDS signal start detection.
15	RXD	P14/IRQ4	I	–	L	Denon Bus data input.
16	Mute	P15/IRQ5	O	H	L	Speaker relay off.
17	GND	P16/EVNT	I	–	–	Not used.
18	N.C.	P33	O	L	L	No connection.
19	RT Gr LED	P32	O	L	H	RT green LED.
20	TA Gr LED	P31	O	L	H	TA green LED.
21	PTY Gr LED	P30	O	L	H	PTY green LED.
22	RT Rd LED	P47	O	L	H	RT red LED.
23	TA Rd LED	P46	O	L	H	TA red LED.
24	RTY Rd LED	P45	O	L	H	PTY red LED.
25	Diode 1	P44	I	–	H	Setting return input 1.
26	Diode 2	P43	I	–	H	Setting return input 2.
27	Seg 1	P42/FS18	O	L	H	Segment 16 output.
28	Seg 2	P41/FS17	O	L	H	Segment 15 output.
29	Seg 3	P40/FS16	O	L	H	Segment 14 output.
30	Seg 4	P50/FS15	O	L	H	Segment 13 output.
31	Seg 5	P51/FS14	O	L	H	Segment 12 output.
32	Seg 6	P52/FS13	O	L	H	Segment 11 output.
33	Seg 7	P53/FS12	O	L	H	Segment 10 output.
34	Seg 8	P54/FS11	O	L	H	Segment 9 output.
35	Seg 9	P55/FS10	O	L	H	Segment 8 output.
36	Seg 10	P56/FS9	O	L	H	Segment 7 output.
37	Seg 11	P57/FS8	O	L	H	Segment 6 output.
38	Vdisp	P17/Vdsp	–	–	–	High B voltage.
39	Seg 12	P60/FS7	O	L	H	Segment 5 output.
40	Seg 13	P61/FS6	O	L	H	Segment 4 output.
41	Seg 14	P62/FS5	O	L	H	Segment 4 output.
42	Seg 15	P63/FS4	O	L	H	Segment 4 output.
43	Seg 16	P64/FS3	O	L	H	Segment 4 output.
44	Dig 11	P65/FD5	O	L	H	Digit 11 output.
45	Dig 10	P66/FD6	O	L	H	Digit 10 output.
46	Dig 9	P67/FD7	O	L	H	Digit 9 output.
47	Dig 8	P70/FD7	O	L	H	Digit 8 output.
48	Dig 7	P71/FD7	O	L	H	Digit 7 output.
49	Dig 6	P72/FD7	O	L	H	Digit 6 output.
50	Dig 5	P73/FD7	O	L	H	Digit 5 output.

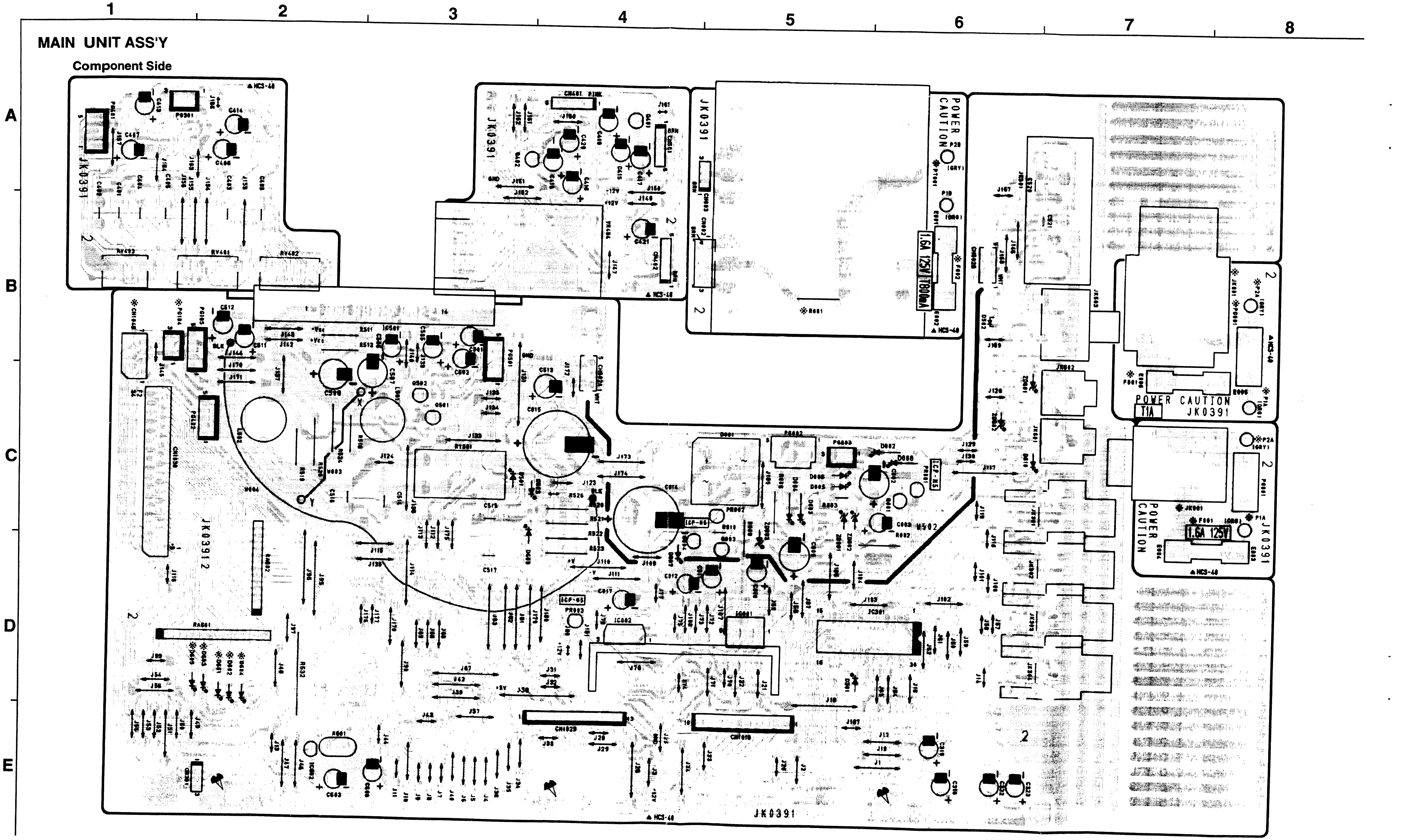
Pin No.	Symbol	Port Name	I/O	INI	ACT	Function
51	Dig 4	P74/FD7	O	L	H	Digit 4 output.
52	Dig 3	P75/FD7	O	L	H	Digit 3 output.
53	Dig 2	P76/FD7	O	L	H	Digit 2 output.
54	Dig 1	P77/FD7	O	L	H	Digit 1 output.
55	Vcc	Vcc	–	–	–	5V.
56	Volume Dwn	P80	O	H	H	Master volume down.
57	Volume Up	P81	O	H	H	Master volume up.
58	Power	P82	O	L	L	Amplifier circuit power on.
59	Tuner Mute	P83	O	H	L	Tuner audio mute.
60	Auto/Mono	P84	O	H	–	FM Auto/Mono setting.
61	Ant Sns	P85	O	L	H	Antenna sensitivity reduction.
62	SDB	P86	O	L	H	Super Dynamic Bass.
63	Sel EEROM	P87	O	L	H	Select SCI to EEROM.
64	PLL CE	P90	O	L	H	PLL serial data selection output.
65	Bus Clock	P91/SCK1	O	H	–	Denon Bus clock.
66	Bus Data In	P92/SI1	I	–	–	Denon Bus data input.
67	Bus Data Out	P93/SO1	O	H	–	Denon Bus data output.
68	RDS Clock	P97/SCK2	O	H	–	RDS data fetch clock input, PLL control clock output, LC7821 clock output.
69	RDS Data	P95/SI2	I	H	–	RDS serial data input.
70	PLL Data	P96/SO2	O	H	–	PLL serial data output, LC7821 serial data output.
71	RDS Res	P97	O	H	L	LC7070 reset output.
72	PLL STRQ	PA0	O	L	H	IF count operation request output.
73	LC7821CE	PA1	O	L	H	LC7821 chip enable.
74	AVcc	AVcc	–	–	–	Analog 5 V power supply.
75	Key AD0	P00/AN0	I	–	–	Analog key input 1.
76	Key AD1	P01/AN1	I	–	–	Analog key input 1.
77	PWB Test	P02/AN2	I	–	–	Board check at 5 V.
78	Stereo In	P03/AN3	I	–	L	FM stereo demodulation detection.
79	Signal In	P04/AN4	I	–	L	RF signal detection signal input.
80	Stop In	P05/AN5	I	–	L	IF count tuning detection.

RECEIVER SECTION

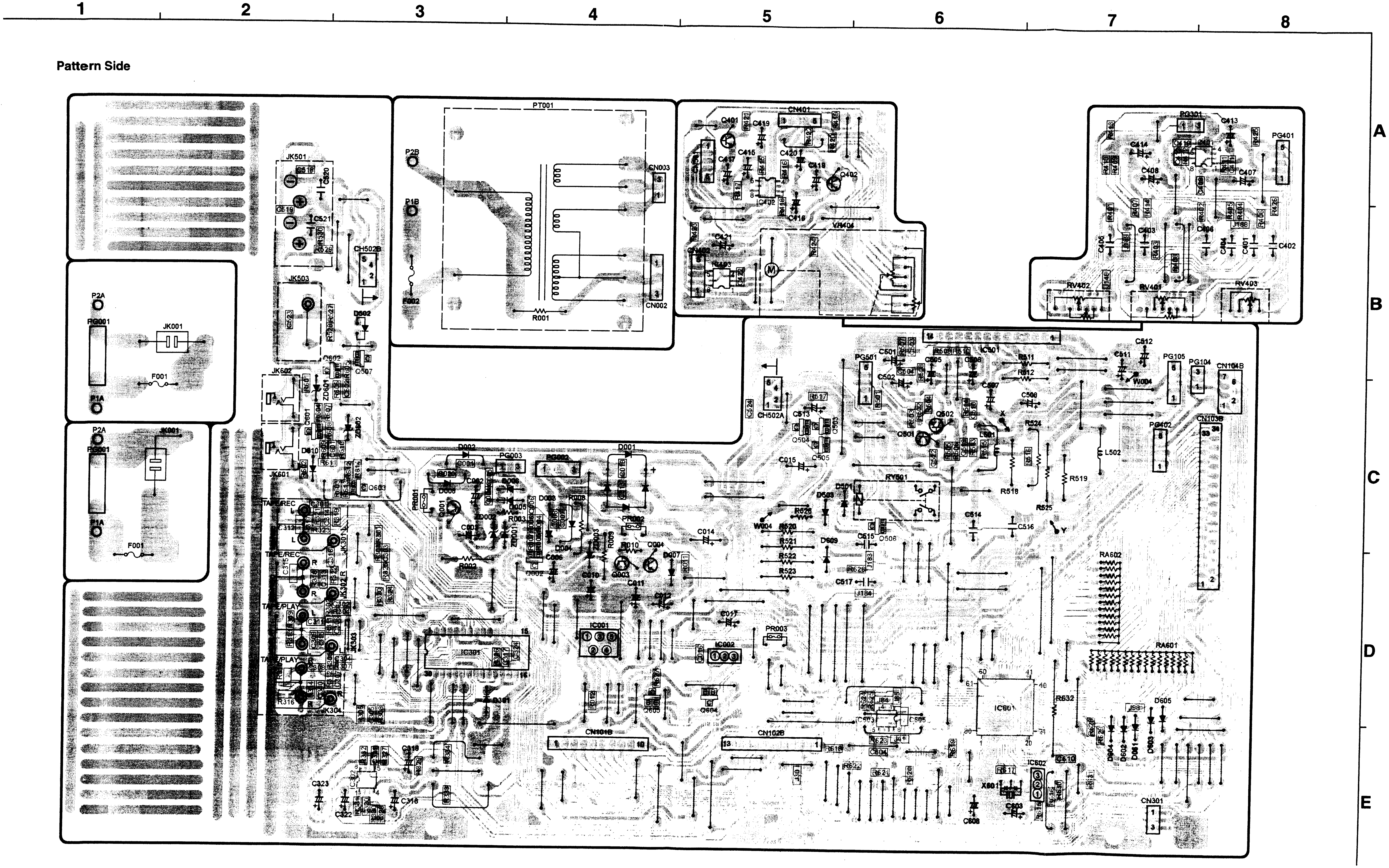
PRINTED WIRING BOARD

MAIN UNIT ASS'Y

Component Side


1
2
3
4
5
6
7
8
A
B
C
D
E
JK0391
JK03912
POWER CAUTION
1.6A 125V
T800mA
T1A
▲HCS-40
CN401 PINK
CN1029
CN1019
RY501
IC301
IC302
RA601
R601
+12V
-12V
GND
+Vcc
-Vcc
+5V

Pattern Side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2
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C404
C401
C402
C405
RV402
RV401
RV403
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PG003
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Q001
D003
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R003
R002
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D004
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C011
C012
PR002
R009
R010
Q004
Q003
D007
C014
IC001
IC002
PR003
C017
IC301
D301
CN101B
CN102B
TAPE/REC
TAPE/PLAY
JK301
JK302
JK303
JK304
C323
C322
C318
C316
PG501
C501
C502
C505
C506
IC501
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R512
C507
C508
C512
C511
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C517
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RA601
IC601
R632
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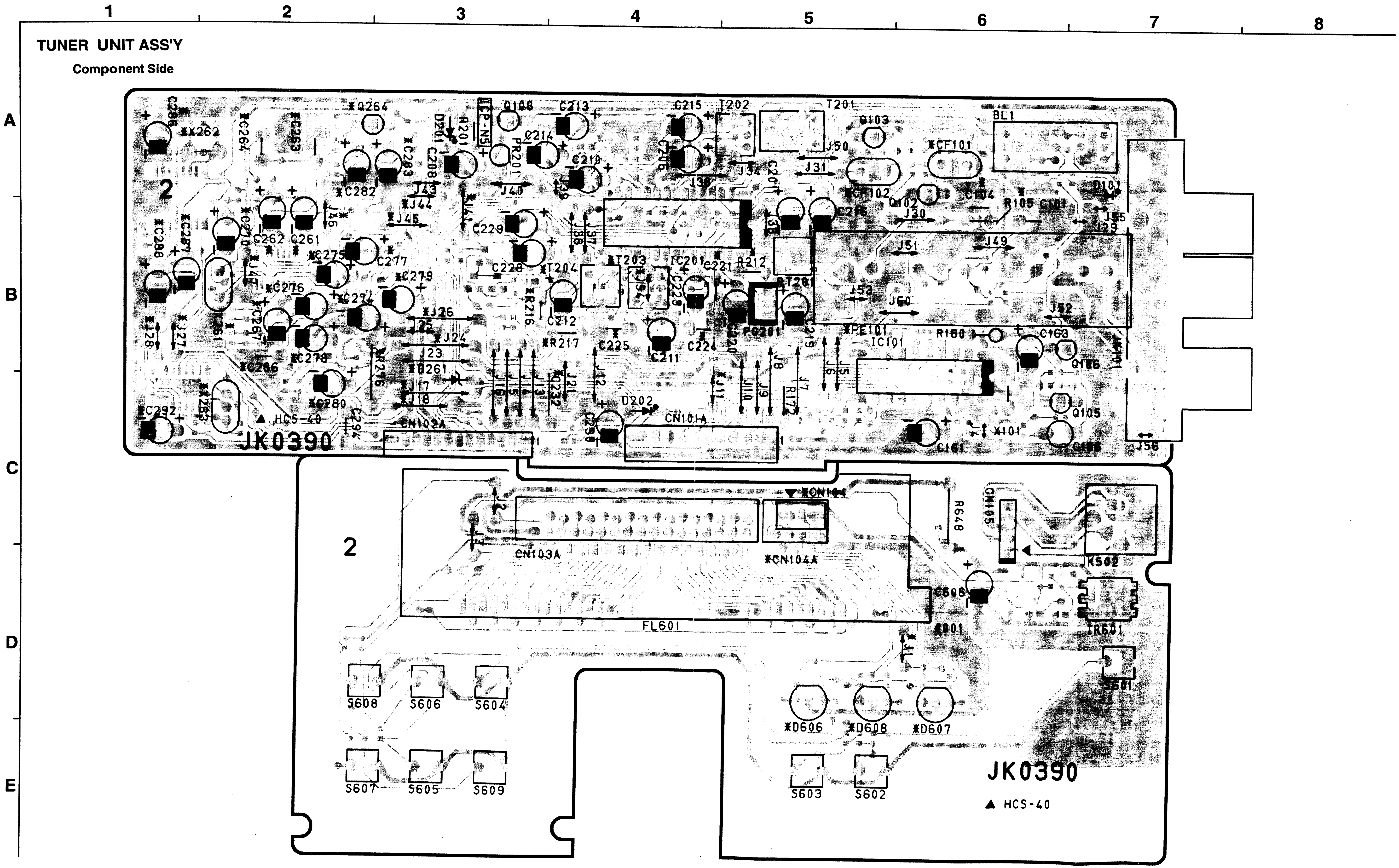
C603
C608
C610

TUNER UNIT ASS'Y

Component Side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C282
C208
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R201
ICP-N5
Q108
PR201
C213
C214
C210
C215
C209
T202
T201
Q103
CF101
BL1
J50
J31
J34
J36
C207
CF102
C104
R105
C101
Q101
Q102
J30
J55
J29
C216
J33
J43
J44
J45
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C287
C275
C277
C279
C276
C274
J47
T204
T203
IC201
C221
R212
J51
J49
RT201
J53
J60
J52
C223
J54
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C212
C211
C225
C224
C220
PC201
C219
FE101
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C266
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J24
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C292
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HCS-40
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CN102A
J16
J15
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J13
J21
C232
J12
D202
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J10
J9
J8
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J5
J4
X101
Q105
C161
C166
J56
CN104
R648
CN105
JK502
J2
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CN104A
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FL601
#001
IR601
J1
S601
S608
S606
S604
S607
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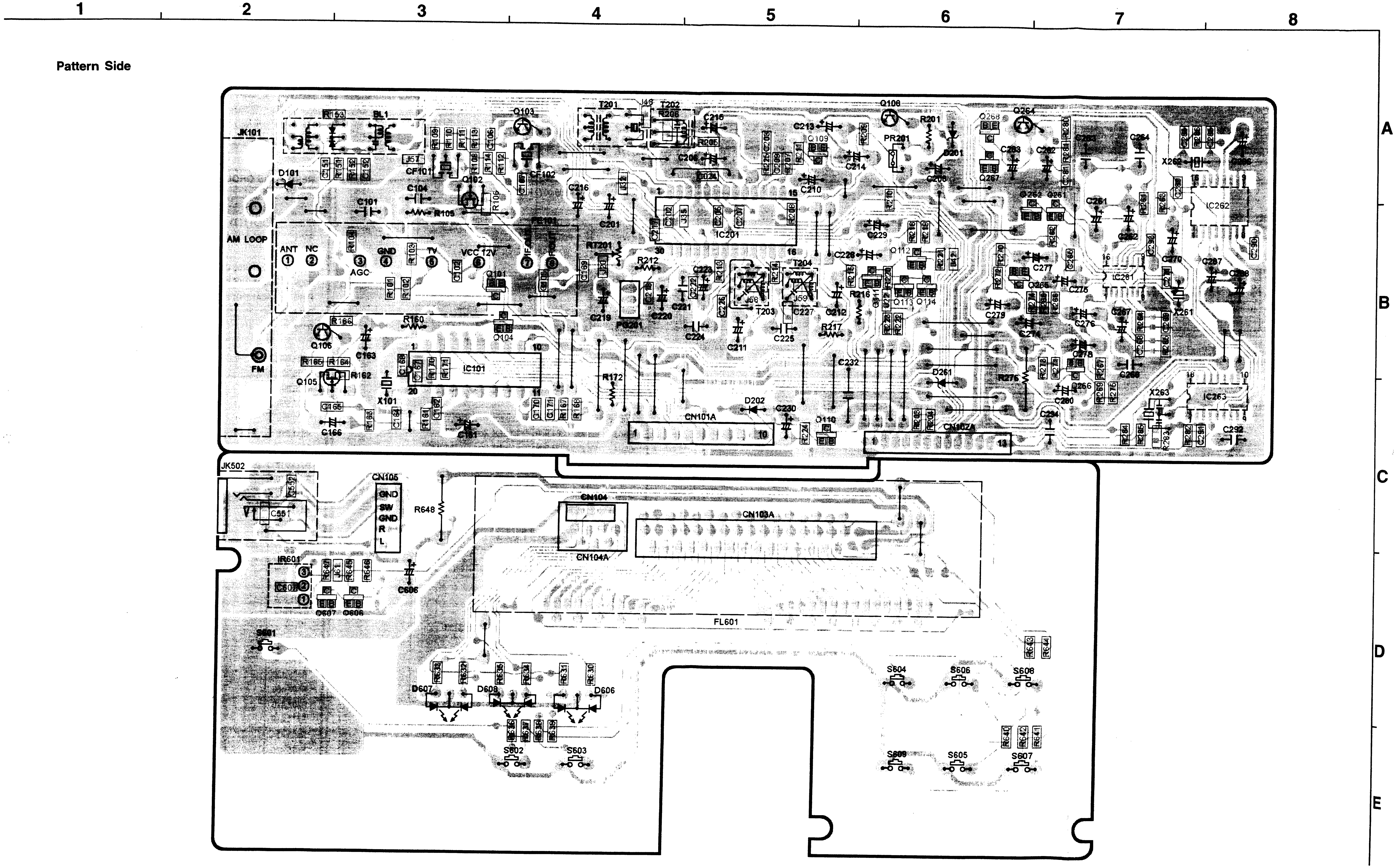
S609
D606
D608
D607
S603
S602
JK0390
HCS-40

Pattern Side


1
2
3
4
5
6
7
8
A
B
C
D
E
JK101
AM LOOP
FM
D101
R153
BL1
CF101
CF102
Q102
Q103
C101
C104
R105
R106
ANT
NC
AGC
GND
TV
VCC 12V
IF
Q101
Q104
Q105
Q106
R160
R162
R164
R165
R166
C163
C165
C166
X101
IC101
C161
T201
T202
J48
R206
R205
C215
C205
C216
C201
RT201
R212
PG201
C219
C220
C221
C222
C223
C224
IC201
T203
T204
J58
J59
C211
C225
C227
C212
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R216
R172
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R224
Q108
R201
PR201
D201
C208
C213
Q109
C214
C210
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C228
Q112
Q113
Q114
C232
D261
R276
C280
Q266
C234
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Q268
Q264
Q267
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Q262
Q261
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C270
C287
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C267
C266
X263
IC263
C292
JK502
C552
C551
CN105
GND
SW
GND
R
L
R648
CN104
CN104A
CN103A
FL601
IR601
C607
Q607
Q606
C606
S601
S602
S603
S604
S605
S606
S607
S608
S609
D606
D607
D608

RECEIVER SECTION

NOTE FOR PARTS LIST

- Part indicated with the mark "⊙" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:
Parts marked with this symbol ⚠ ■ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

● Resistors

Ex.:	RN	14K	2E	182	G	FR
	Type	Shape and performance	Power	Resistance	Allowable error	Others

Type	Power	Allowable error	Others
RD : Carbon	2B : 1/8W	F : ±1%	P : Pulse-resistant type
RC : Composition	2E : 1/4W	G : ±2%	NL : Low noise type
RS : Metal oxide film	2H : 1/2W	J : ±5%	NB : Non-burning type
RW : Winding	3A : 1W	K : ±10%	FR : Fuse-resistor
RN : Metal film	3D : 2W	M : ±20%	F : Lead wire forming
RK : Metal mixture	3F : 3W		
	3H : 5W		

*** Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
2 — Indicates number of zeros after effective number.
1 8 — 2-digit effective number.
- Units: ohm

1 R 2 ⇒ 1.2 ohm
2 — 1-digit effective number.
1 R — 2-digit effective number, decimal point indicated by R.
- Units: ohm

● Capacitors

Ex.:	CE	04W	1H	2R2	M	BP
	Type	Shape and performance	Dielectric strength	Capacity	Allowable error	Others

Type	Dielectric strength	Allowable error	Others
CE : Aluminum foil electrolytic	0J : 6.3V	F : ±1%	HS : High stability type
CA : Aluminum solid electrolytic	1A : 10V	G : ±2%	BP : Non-polar type
CS : Tantalum electrolytic	1C : 16V	J : ±5%	HR : Ripple-resistant type
CQ : Film	1E : 25V	K : ±10%	DL : For change and discharge
CK : Ceramic	1V : 35V	M : ±20%	HF : For assuring high frequency
CC : Ceramic	1H : 50V	Z : +80% −20%	U : UL part
CP : Oil	2A : 100V		C : CSA part
CM : Mica	2B : 125V	P : +100% −0%	W : UL-CSA type
CF : Metallized	2C : 160V		F : Lead wire forming
CH : Metallized	2D : 200V	C : ±0.25pF	
	2E : 250V	D : ±0.5pF	
	2H : 500V	= : Others	
	2J : 630V		

*** Capacity (electrolyte only)**

2 2 2 ⇒ 2200μF
2 — Indicates number of zeros after effective number.
2 2 — 2-digit effective number.
- Units: μF.

2 R 2 ⇒ 2.2μF
2 — 1-digit effective number.
2 R — 2-digit effective number, decimal point indicated by R.
- Units: μF.

*** Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022μF
2 — (More than 2)—Indicates number of zeros after effective number.
2 2 — 2-digit effective number.
- Units: μF.

2 2 1 ⇒ 220pF
1 — (0 or 1) — Indicates number of zeros after effective number.
2 2 — 2-digit effective number.
- Units: pF.

- When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

PARTS LIST OF P.W.B. UNIT ASS'Y

MAIN UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC001	9LC P045 13	IC BA12ST-5V	
IC002	9LC P024 11	IC KIA7805PI	
IC301	9L2 3016 92W	IC LC78211	
IC302	263 0672 903	IC BA4558F	
IC401,402	263 0672 903	IC BA4558F	
IC403	263 0905 007	IC BA6208F	
IC601	9LC K076 01	IC HD6433726H	
IC602	9LC P007 12R	IC KIA7045P	
IC603	262 2071 004	IC BR9040F	
⚠ PR001~008	LA2 500U 216	IC protector ICP-N5	
Q001	9L2 3286 25	Transistor 2SB647C	
Q002	273 0384 900	Transistor 2SC2412KT	
Q003	9L2 3286 25	Transistor 2SB647C	
Q004	9LC A006 61R	Transistor KTA1267(GR)	
Q401,402	9LC A006 71R	Transistor KTC3199(GR)	
Q501,502	9LC F009 91R	Transistor KTC3202(Y)	
Q503	273 0384 900	Transistor 2SC2412KT	
Q504	271 0238 908	Transistor 2SA1037AK (Q/R)	
Q505	273 0384 900	Transistor 2SC2412KT	
Q506	269 0082 902	Transistor DTC114EK	
Q507	269 0066 902	Transistor DTC323TK	
Q601	271 0238 908	Transistor 2SA1037AK (Q/R)	
Q602,603	273 0384 900	Transistor 2SC2412KT	
Q604	269 0055 900	Transistor DTA144E	
Q605	269 0054 901	Transistor DTC144EK	
D001	276 0338 007	Diode S4VB20	
D002~004	9L2 3980 61T	Diode IN4002	
D005~007	276 0401 002	Diode IN4531/ISS133	
D008	9L2 3980 61T	Diode IN4002	
D301	276 0401 002	Diode IN4531/ISS133	
D501	276 0401 002	Diode IN4531/ISS133	
D502	9L2 3973 14	LED RLL-20503PD-R15(S)	
D503	276 0401 002	Diode IN4531/ISS133	
D602	276 0401 002	Diode IN4531/ISS133	U.S.A./Canada/Asia models
D603	276 0401 002	Diode IN4531/ISS133	Except U.S.A./ Canada model
D604	9L2 3980 61T	Diode IN4002	Asia model only
D605	276 0401 002	Diode IN4531/ISS133	Except Asia model
D609,610	276 0401 002	Diode IN4531/ISS133	

Ref. No.	Part No.	Part Name	Remarks
ZD001	276 0645 949	Zener diode MTZJ-27A	27V
ZD002	276 0643 996	Zener diode MTZJ-5.6A	5.6V
ZD003	9L2 3481 93M	Zener diode MTZJ-12C	12V
ZD601,602	276 0637 902	Zener diode MTZJ-6.2A	6.2V
RESISTORS GROUP			
⚠ R001	242 0074 009	Composition 2.7Mohm 1/2W	RES SOLID 1/2W 2.7M-J U.S.A./Canada models
R002	9LH 1133 71	Carbon film 3.3kohm 1/2W	
R003	241 2400 995	Carbon film 10kohm 1/6W	RD14B2E103J (5)
R004~007		Carbon chip 10kohm	
R008	241 0193 000	Carbon film 2.2kohm 1/2W	RD14B2H222J
R009	241 2398 955	Carbon film 1kohm 1/4W	RD14B2E102J
R010	241 2401 978	Carbon film 22kohm 1/6W	RD14B2E223J (5)
R011		Carbon chip 8.2kohm	
R012		Carbon chip 22kohm	
R301,302		Carbon Chip 470ohm	
R303,304		Carbon chip 82kohm	
R305,306		Carbon chip 8.2kohm	
R307,308		Carbon chip 39kohm	
R309,310		Carbon chip 5.6kohm	
R311,312		Carbon chip 47kohm	
R313,314		Carbon chip 8.2kohm	
R315,316		Carbon chip 39kohm	
R317,318		Carbon chip 1Mohm	
R319,320		Carbon Chip 470ohm	
R321,322		Carbon chip 1Mohm	
R323,324		Carbon Chip 470ohm	
R325		Carbon chip 100kohm	
R326		Carbon chip 680kohm	
R327,328		Carbon chip 100kohm	
R329,330		Carbon chip 1kohm	
R331,332		Carbon chip 4.7kohm	
R333,334		Carbon chip 100kohm	
R401,402		Carbon chip 24kohm	
R403,404		Carbon Chip 220ohm	
R405,406		Carbon chip 10kohm	
R407,408		Carbon chip 22kohm	
R409,410		Carbon chip 39kohm	
R411,412		Carbon chip 1Mohm	
R413,414		Carbon chip 1kohm	
R415,416		Carbon Chip 330ohm	
R417,418		Carbon chip 470kohm	
R419,420		Carbon chip 56kohm	
R421,422		Carbon chip 5.6kohm	
R423~426		Carbon chip 10kohm	
R501~504		Carbon chip 1kohm	

RECEIVER SECTION

Ref. No.	Part No.	Part Name	Remarks
R505,506		Carbon chip 10kohm	
R507,508		Carbon chip 56kohm	
R509,510		Carbon chip 2.7kohm	
R511,512	9L1 1106 21	Fuse resistor 100ohm	
R513,514		Carbon chip 56kohm	
R515~517		Carbon chip 22kohm	
R518~519	241 2393 989	Carbon film 10ohm 1/4W	RD14B2E100J
R520~523	241 0137 008	Carbon film 10ohm 1/2W	RD14B2H100J
⚠ R524,525	244 0035 002	Metal oxide 33ohm 1W	RS14B3A331JNB
⚠ R526	241 2322 015	Carbon film 82ohm 1/4W (NB)	RD14B2E820JNBF
R527		Carbon chip 10kohm	
R528		Carbon chip 2.2kohm	
R529,530		Carbon chip 22kohm	
R601		Carbon Chip 100ohm	
R602		Carbon Chip 220ohm	
R603		Carbon chip 47kohm	
R604		Carbon chip 1kohm	
R605,606		Carbon chip 22kohm	
R607		Carbon chip 2.2kohm	
R608,609		Carbon chip 22kohm	
R610~612		Carbon chip 10kohm	
R613		Carbon chip 22kohm	
R614		Carbon chip 10kohm	
R615		Carbon Chip 470ohm	
R616		Carbon chip 10kohm	
R617		Carbon chip 1Mohm	
R618~620		Carbon chip 10kohm	
R621,622		Carbon chip 1kohm	
R623~631		Carbon chip 10kohm	
R632	241 2398 955	Carbon film 1kohm 1/6W	RD14B2E102J (5)
RV401,402	9LA Y001 88	Variable resistor 50kohm	
RV403	9LA Y003 91	Variable resistor 100kohm	
RV404	9LA Y002 51	Motor volume resistor 100Kohm	
CAPACITORS GROUP			
C001		Chip capacitor 0.01µF/50V	
C002	254 4261 028	Electrolytic 100µF/50V	CE04W1H101M
C003	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C004~006		Chip capacitor 0.01µF/50V	
C007,008		Chip capacitor 0.022µF/50V	
C009	254 4261 028	Electrolytic 100µF/50V	CE04W1H101M
C010~012	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C013		Chip capacitor 0.01µF/50V	
C014,015	254 4438 709	Electrolytic 4700µF/35V	CE04W1V472M
C016		Chip capacitor 0.01µF/50V	
C017	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C018		Chip capacitor 0.01µF/50V	
C020		Chip capacitor 0.01µF/50V	

Ref. No.	Part No.	Part Name	Remarks
C301		Chip capacitor 0.01µF/50V	
C302,303		Chip capacitor 680pF/50V	
C304~307		Chip capacitor 220pF/50V	
C308		Chip capacitor 0.01µF/50V	
C309,310		Chip capacitor 220pF/50V	
C311		Chip capacitor 0.01µF/50V	
C312~315		Chip capacitor 220pF/50V	
C316		Chip capacitor 0.01µF/50V	
C317		Chip capacitor 0.022µF/50V	
C318,319	254 4260 045	Electrolytic 1µF/50V	CE04W1H010M
C320,321		Chip capacitor 100pF/50V	
C322,323	254 4260 045	Electrolytic 1µF/50V	CE04W1H010M
C324		Chip capacitor 0.022µF/50V	Asia model only
C401,402	255 1258 011	Mylar film 1800pF/50V	CQ93M1H182J
C403~406	255 1260 012	Mylar film 0.022µF/50V	CQ93M1H223J(B)
C407,408	254 4260 045	Electrolytic 1µF/50V	CE04W1H010M
C409~412		Chip capacitor 220pF/50V	
C413,414	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C415,416	254 4260 016	Electrolytic 0.22µF/50V	CE04W1HR22M
C417,418	254 4195 055	Electrolytic 0.15µF/50V	CE04W1HR15M
C419,420	254 4256 033	Electrolytic 47µF/25V	CE04W1E470M
C421	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C422		Chip capacitor 0.01µF/50V	
C501,502	254 4260 045	Electrolytic 1µF/50V	CE04W1H010M
C503,504		Chip capacitor 470pF/50V	
C505,506	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C507,508	254 4261 028	Electrolytic 100µF/50V	CE04W1H101M
C509,510		Chip capacitor 3.0pF	
C511,512	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C513	254 4250 042	Electrolytic 330µF/6.3V	CE04W0J331M
C514~517	255 1084 007	Mylar film 0.1µF/50V(ECQ)	CQ93M1H104K ECQM
C518,519		Chip capacitor 0.01µF/50V	Europe/U.K. models
C520,521		Mylar film 0.033µF/50V(AMZ)	Europe/U.K. models
C522		Chip capacitor 1000pF/50V	
C523,524		Chip capacitor 0.047µF/50V	Europe/U.K. models
C601,602		Chip capacitor 1000pF/50V	
C603	254 4260 993	Electrolytic 22µF/50V(SSL)	CE04W1H220M
C604,605		Chip capacitor 0.01µF/50V	
C608	254 4252 037	Electrolytic 100µF/10V(SME)	CE04W1A101M
C609		Chip capacitor 1000pF/50V	
C610		Chip capacitor 0.01µF/50V	

OTHER PARTS GROUP				Q'ty
RY501	9L2 6413 21	SP relay 24V		1
X601	399 0243 903	Crystal CST 8.38 MTW		1
CH502A,502B		5P Cable holder		2

RECEIVER SECTION

Ref. No.	Part No.	Part Name	Remarks	Q'ty
CN002		3P VH-boadin L=100		1
CN003		3P MX-boadin L=80		1
CN101B		Pin header (9113B)		1
CN102B		13P pin header		1
CN103B	9LE D016 62	34P FFC connector		1
CN104B	9LE D007 72	7P FFC connector	Europe/U.K. models	1
CN301		3P MX-boadin		1
CN401		5P PH boardin		1
CN402		5P TXL-boadin L=75		1
CN501		5P MX-boadin L=100		1
E001~004	9L2 7292 52R	Fuse holder		4
J030		Carbon Chip 0ohm		1
J041		Carbon Chip 0ohm		1
J084,085		Carbon Chip 0ohm		2
J098		Carbon Chip 0ohm		1
J148		Carbon Chip 0ohm		1
J183,184		Carbon Chip 0ohm		2
J188,189		Carbon Chip 0ohm		2
⚠JK001	9LE P001 32	AC outlet (for EDISON)	U.S.A./Canada models	1
⚠JK001	9LE P000 91	AC outlet (YKE1-0090)	Except U.S.A./ Canada model	1
JK301	9LE R003 92	3P US pin jack (WHT)		1
JK302	9LE R003 91	3P US pin jack (RED)		1
JK303	9LE R003 92	3P US pin jack (WHT)		1
JK304	9LE R003 91	3P US pin jack (RED)		1
JK501	9LE U000 86	4P SP terminal		1
JK503	9LE R002 41	1P US pin jack		1
JK601,602	9L2 6714 13	Mini jack (3.5)		2
L501,502	9L2 2273 61	Audio trap coil		2
N001		Style pin		1
PG001		2P (4) VH pin post		1
PG002		3P VH pin post		1
PG003		3P MX pin post		1
PG104		3P TXL pin post	U.S.A./Canada models	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
PG105		5P PH plug		1
PG301		3P MX pin post		1
PG401		5P PH plug		1
PG402		5P TXL pin post		1
PG501		5P MX pin post		1
#002	9L8 6914 10	Screw BH BT 3x10		2
#003		Heat sink		1
#004		Shield plate		1
#005		Shield plate (AUX)	Except U.S.A./ Canada model	1
W001		1 Pin boadin connector L=150 (ORG)		1
W002		1 Pin boadin connector L=150 (GRY)		1
W003		UL wire L=50 (BLK)		1
W004		UL wire L=170 (BLK)		1
W502		5P ribbon wire L=225		1
	9LJT07001	Main P.W.B. unit Ass'y	U.S.A./Canada models	1
	9LJT07002	Main P.W.B. unit Ass'y	Europe model only	1
	9LJT07003	Main P.W.B. unit Ass'y	U.K. model only	1
	9LJT07006	Main P.W.B. unit Ass'y	Asia model only	1

TUNER & DISPLAY UNIT ASS'Y

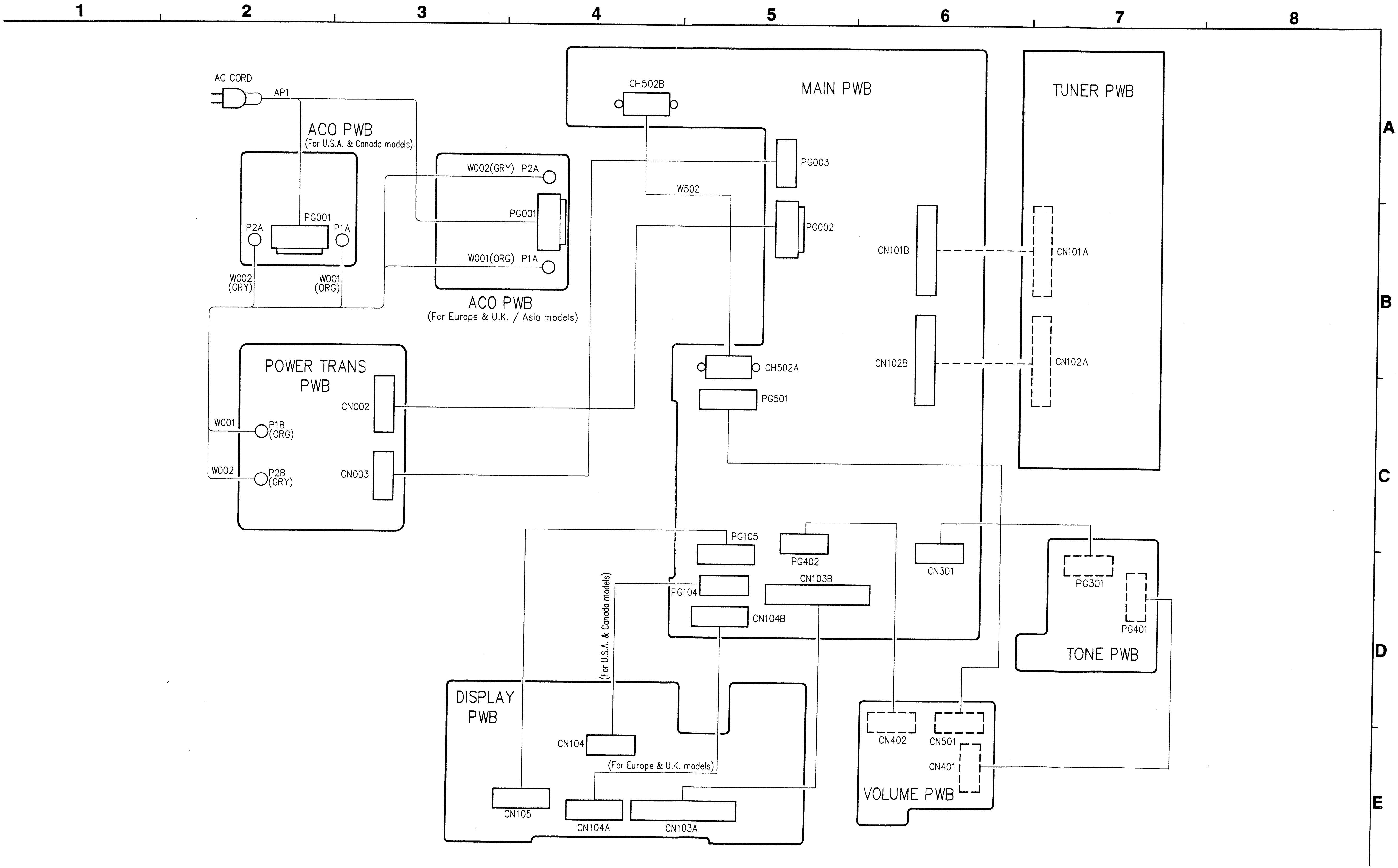
Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC101	262 0703 002	IC LM7000	
IC201	9LC P045 01	IC LA1837	
IC262	262 1701 906	IC SAA6579T	Except Asia model
IC263	9LC K044 71	IC LC7074M	Except Asia model
⚠PR201	268 0077 901	IC protector ICP-N5	
Q101	269 0082 902	Transistor DTC114EK	Europe/U.K. models
Q102	275 0051 006	Transistor 2SK161	
Q103	273 0434 902	Transistor 2SC2058S(Q)	
Q104	269 0083 901	Transistor DTA114EK	
Q105	275 0053 907	Transistor 2SK365 (BL/GR)	
Q106	9LA T012 44R	Transistor KTC3199L (GR)	
Q108	9L2 3190 52T	Transistor HIT8050C	
Q109	269 0082 902	Transistor DTC114EK	
Q110	269 0083 901	Transistor DTA114EK	
Q111~114	269 0066 902	Transistor DTC323TK	
Q606,607	273 0384 900	Transistor 2SC2412KT	
D101	276 0401 905	Diode IN4531/ISS133	
D201	9L2 3481 71M	Diode MTZJ - 10A	
D202	276 0401 905	Diode IN4531/ISS133	
D606	9LC H011 31R	Diode SPR-505MVW (RED-GREEN)	U.S.A./Canada models
D606~608	9LC H011 31R	Diode SPR-505MVW (RED-GREEN)	Europe/U.K. models
FL601	9LD D000 61	FL tube (FLD)	
RESISTORS GROUP			
R101		Carbon chip 1kohm	
R102		Carbon chip 150ohm	Europe/U.K. models
R103		Carbon chip 27kohm	Europe/U.K. models
R104		Carbon chip 22kohm	Europe/U.K. models
R105	241 2396 960	Carbon film 22ohm l/6W	RD14B2E151J (5)
R106		Carbon chip 390ohm	Europe/U.K. models
R106		Carbon chip 1kohm	U.S.A./Canada/Asia models
R108		Carbon chip 330ohm	Except Asia model
R109		Carbon chip 330ohm	
R110		Carbon chip 220ohm	
R111		Carbon chip 4.7kohm	
R112		Carbon chip 330ohm	
R113		Carbon chip 390ohm	Europe/U.K. models
R113		Carbon chip 2.7kohm	U.S.A./Canada/Asia models
R114		Carbon chip 100ohm	
R151,152		Carbon chip 100kohm	
R153		Carbon chip 47kohm	
⚠R160	241 2377 947	Carbon film 100ohm 1/4W(NB)	RD14B2E101JNBS
R161		Carbon chip 1kohm	
R162		Carbon chip 220ohm	
R163		Carbon chip 2.2kohm	
R164		Carbon chip 220ohm	
R165		Carbon chip 470ohm	
R166		Carbon chip 22kohm	
R167,168		Carbon chip 220ohm	
R170,171		Carbon chip 10kohm	
R172	241 2400 995	Carbon film 10Kohm l/6W	RD14B2E103J (5)
R201	241 2398 955	Carbon film 1Kohm l/6W	RD14B2E102J (5)
R203,204		Carbon chip 10kohm	
R205		Carbon chip 100ohm	
R206,207		Carbon chip 4.7kohm	
R208		Carbon chip 10kohm	
R209		Carbon chip 30kohm	
R210,211		Carbon chip 4.7kohm	
R212	241 2400 953	Carbon film 6.8Kohm l/6W	RD14B2E682J (5) U.S.A./Canada models
R212	241 2400 995	Carbon film 10Kohm l/6W	RD14B2E103J (5) Except U.S.A./ Canada model
R213		Carbon chip 8.2kohm	
R214,215		Carbon chip 3.3kohm	
R218,219		Carbon chip 1kohm	
R220,221		Carbon chip 220ohm	
R222,223		Carbon chip 1kohm	
R224		Carbon chip 5.6kohm	
R225		Carbon chip 51ohm	
R282		Carbon chip 10kohm	Except Asia model
R283		Carbon chip 1Mohm	Except Asia model
R284,285		Carbon chip 1kohm	Except Asia model
R286		Carbon chip 1Mohm	Except Asia model
R630		Carbon chip 330ohm	Except Asia model
R631		Carbon chip 220ohm	Except Asia model
R632		Carbon chip 330ohm	Europe/U.K. models
R633		Carbon chip 220ohm	Europe/U.K. models
R634		Carbon chip 330ohm	Europe/U.K. models
R635		Carbon chip 220ohm	Europe/U.K. models
R636		Carbon chip 680ohm	
R637		Carbon chip 390ohm	
R638		Carbon chip 270ohm	
R639		Carbon chip 180ohm	
R640		Carbon chip 150ohm	
R641		Carbon chip 180ohm	
R642		Carbon chip 150ohm	
R643,644		Carbon chip 1kohm	
R645		Carbon chip 22kohm	
R646		Carbon chip 100kohm	
R647		Carbon chip 22kohm	
R648	241 2394 991	Carbon film 33ohm	RD14B2E300J
RT201	211 6079 907	Semi variable resistor 10kohm	
CAPACITORS GROUP			
C101	255 4213 972	Mylar film 0.01μF/50V	CQ93M1H103J (B)
C102		Chip capacitor 0.01μF/50V	
C104		Axial capacitor 0.047μF/50V (F)	U.S.A./Canada/Asia models
C105		Chip capacitor 1000pF/50V	
C106		Chip capacitor 0.01μF/50V	
C107		Chip capacitor 0.022μF/50V	
C151		Chip capacitor 0.01μF/50V	
C152		Chip capacitor 9pF	
C161	254 4260 045	Electrolytic 1μF/50V	CE04W1H010M
C162		Chip capacitor 0.01μF/50V	
C163	254 4256 033	Electrolytic 47μF/25V	CE04W1E470M
C164		Chip capacitor 0.01μF/50V	
C165		Chip capacitor 0.022μF/50V	
C166	254 3056 917	Electrolytic 1μF/50V (SME) BP	CE04D1H010MBP
C167,168		Chip capacitor 27pF	
C169		Chip capacitor 1000pF/50V	
C170		Chip capacitor 100pF/50V	
C171		Chip capacitor 1000pF/50V	
C201	254 4256 033	Electrolytic 47μF/25V	CE04W1E470M
C202~204		Chip capacitor 0.047μF/50V	
C205		Chip capacitor 0.01μF/50V	
C206	254 4260 045	Electrolytic 1μF/50V	CE04W1H010M
C207		Chip capacitor 0.01μF/50V	
C208	254 4256 033	Electrolytic 47μF/25V	CE04W1E470M
C209		Chip capacitor 0.047μF/50V	
C210	254 4260 045	Electrolytic 1μF/50V	CE04W1H010M
C211,212	254 4260 087	Electrolytic 10μF/50V	CE04W1H100M
C213	254 4260 045	Electrolytic 1μF/50V	CE04W1H010M
C214	254 4260 935	Electrolytic 0.47μF/50V	CE04W1HR47M
C215	254 4260 045	Electrolytic 1μF/50V	CE04W1H010M
C216	254 4258 031	Electrolytic 33μF/35V	CE04W1V330M
C217,218		Chip capacitor 0.047μF/50V	
C219	254 4260 061	Electrolytic 3.3μF/50V	CE04W1H3R3M
C220	254 4260 993	Electrolytic 22μF/50V	CE04W1H220M
C221	253 1194 959	Axial capacitor 1000pF/50V (B)	CK14B1H102K Asia model only
C221	254 4260 087	Axial capacitor 560pF/50V (B)	Except Asia model
C222		Chip capacitor 0.047μF/50V	
C223	254 4260 087	Electrolytic 10μF/50V	CE04W1H100M
C224,225		Mylar film 0.047μF/50V (AMZ)	U.S.A./Canada models
C224,225		Mylar film 0.033μF/50V (AMZ)	Except U.S.A./ Canada model
C226,227		Chip capacitor 2700pF	Europe/U.K. models
C228,229	254 4260 058	Electrolytic 2.2μF/50V	CE04W1H2R2M
C230	254 4260 087	Electrolytic 10μF/50V	CE04W1H100M
C231	253 1197 914	Axial capacitor 0.1μF/50V (F)	CK14F1H104Z
C284,285		Chip capacitor 27pF	Except Asia model
C286	254 4256 033	Electrolytic 47μF/25V	CE04W1E470M Except Asia model
C287	254 4260 058	Electrolytic 2.2μF/50V	CE04W1H2R2M Except Asia model
C288	254 4256 033	Electrolytic 47μF/25V	CE04W1E470M Except Asia model
C289		Chip capacitor 330pF	Except Asia model
C290		Chip capacitor 560pF	Except Asia model
C291		Chip capacitor 0.01μF/50V	Except Asia model
C292	254 4256 033	Electrolytic 47μF/25V	CE04W1E470M Except Asia model
C294	255 1084 007	Mylar film 0.1μF/50V (AMZ)	CQ93M1H104K
C551,552		Chip capacitor 0.01μF/50V	Europe/U.K. models
C606	254 4250 929	Electrolytic 100μF/6.3V	CE04W0J101M

OTHER PARTS GROUP				Q'ty
BL001	9LB H005 32	AM RF block		1
CF101	261 0064 007	Ceramic filter CFL-SFT10.7MS2	Europe/U.K. models	1
CF101	261 0064 007	Ceramic filter CFL-SFE10.7MA8	U.S.A./Canada /Asia models	1
CF102	261 0064 007	Ceramic filter CFL-SFT10.7MS2	Europe/U.K. models	1
CF102	261 0136 906	Ceramic filter CFL-SFE10.7MS2G	Except Europe /U.K. models	1
FE101	9LH H000 31	Tuner pack	U.S.A./Canada /Asia models	1
FE101	9L2 4286 51	Tuner pack (4-TUNE)	Europe/U.K. models	1

RECEIVER SECTION

Ref. No.	Part No.	Part Name	Remarks	Q'ty
IR601	9LC W002 01	Remote sensor module		1
T201	9LB J002 52	AM IFT (LA1873)		1
T202	9LB J004 22	FM DISCR coil		1
T203,204	9LB J004 11	LPF (19kHz)	Europe/U.K. models	2
X101	9L2 1701 32	Crystal 7.2MHz		1
X262	9L2 1701 33F	Crystal 4.332MHz	Except Asia model	1
X263	399 9018 003	Crystal 4.0MHz	Except Asia model	1
J020		Carbon chip 0ohm		1
J022		Carbon chip 0ohm		1
J032		Carbon chip 0ohm		1
J035		Carbon chip 0ohm		1
J042		Carbon chip 0ohm		1
J057		Carbon chip 0ohm		1
J058,059		Carbon chip 0ohm	U.S.A./Canada /Asia models	2
#001	9LN J017 11	FL holder		1
CN101A		10P socket (9130S)		1
CN102A	9LE Y001 02	13P socket (W)		1
CN103A	9LE D016 72	34P FFC connector (L)		1
CN104		3P connector (TXL) L=75	U.S.A./Canada models	1
CN104A	9LE D008 02	7P FFC connector (L)	Europe/U.K. models	1
CN105		5P PH connector		1
E001		Lug terminal		1
JK101	9LE U000 11	Antenna terminal board		1
JK502	9L2 6950 33	Headphone jack		1
PG201		3P pin post		1
S601~609	212 5604 910	Tact switch		9
	9LJT06991	Tuner / Display P.W.B. unit Ass'y	U.S.A./Canada models	1
	9LJT06992	Tuner / Display P.W.B. unit Ass'y	Europe model only	1
	9LJT06993	Tuner / Display P.W.B. unit Ass'y	U.K. model only	1
	9LJT06996	Tuner / Display P.W.B. unit Ass'y	Asia model only	1

WIRING DIAGRAM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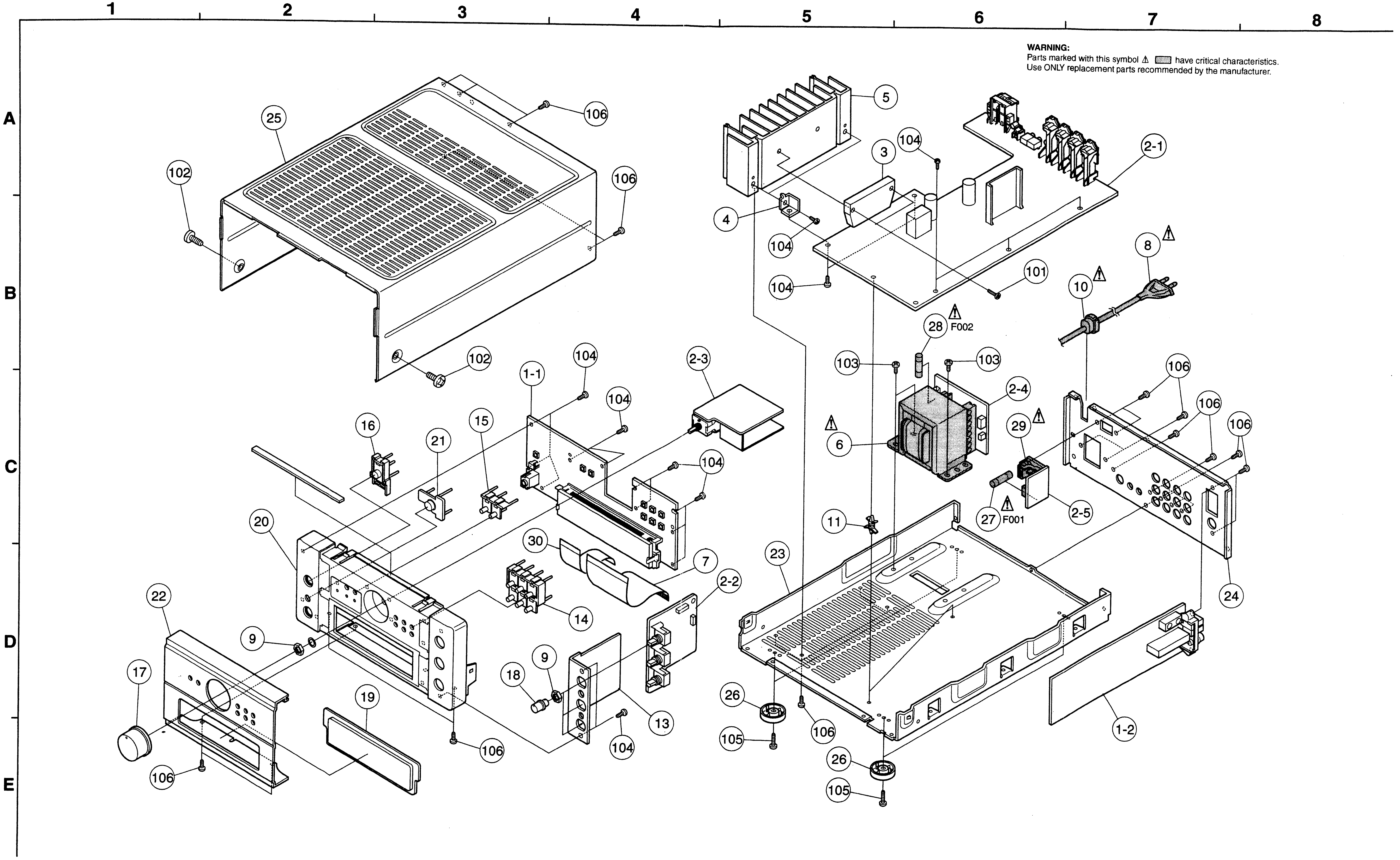
6
7
8
A
B
C
D
E
AC CORD
AP1
ACO PWB
(For U.S.A. & Canada models)
PG001
P2A
P1A
W002
(GRY)
W001
(ORG)
W002(GRY) P2A
PG001
W001(ORG) P1A
ACO PWB
(For Europe & U.K. / Asia models)
POWER TRANS
PWB
CN002
CN003
W001
P1B
(ORG)
W002
P2B
(GRY)
MAIN PWB
CH502B
PG003
W502
PG002
CH502A
PG501
CN101B
CN102B
TUNER PWB
CN101A
CN102A
PG105
PG402
CN301
FG104
CN103B
CN104B
(For U.S.A. & Canada models)
PG301
PG401
TONE PWB
DISPLAY
PWB
CN104
(For Europe & U.K. models)
CN105
CN104A
CN103A
CN402
CN501
CN401
VOLUME PWB

RECEIVER SECTION

EXPLODED VIEW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104
3
2-1
4
104
104
101
8
10
28
F002
103
103
2-4
6
29
27
F001
2-5
11
23
24
1-2
26
105
106
26
105
106
1-1
104
104
2-3
104
16
21
15
20
30
7
2-2
14
22
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104
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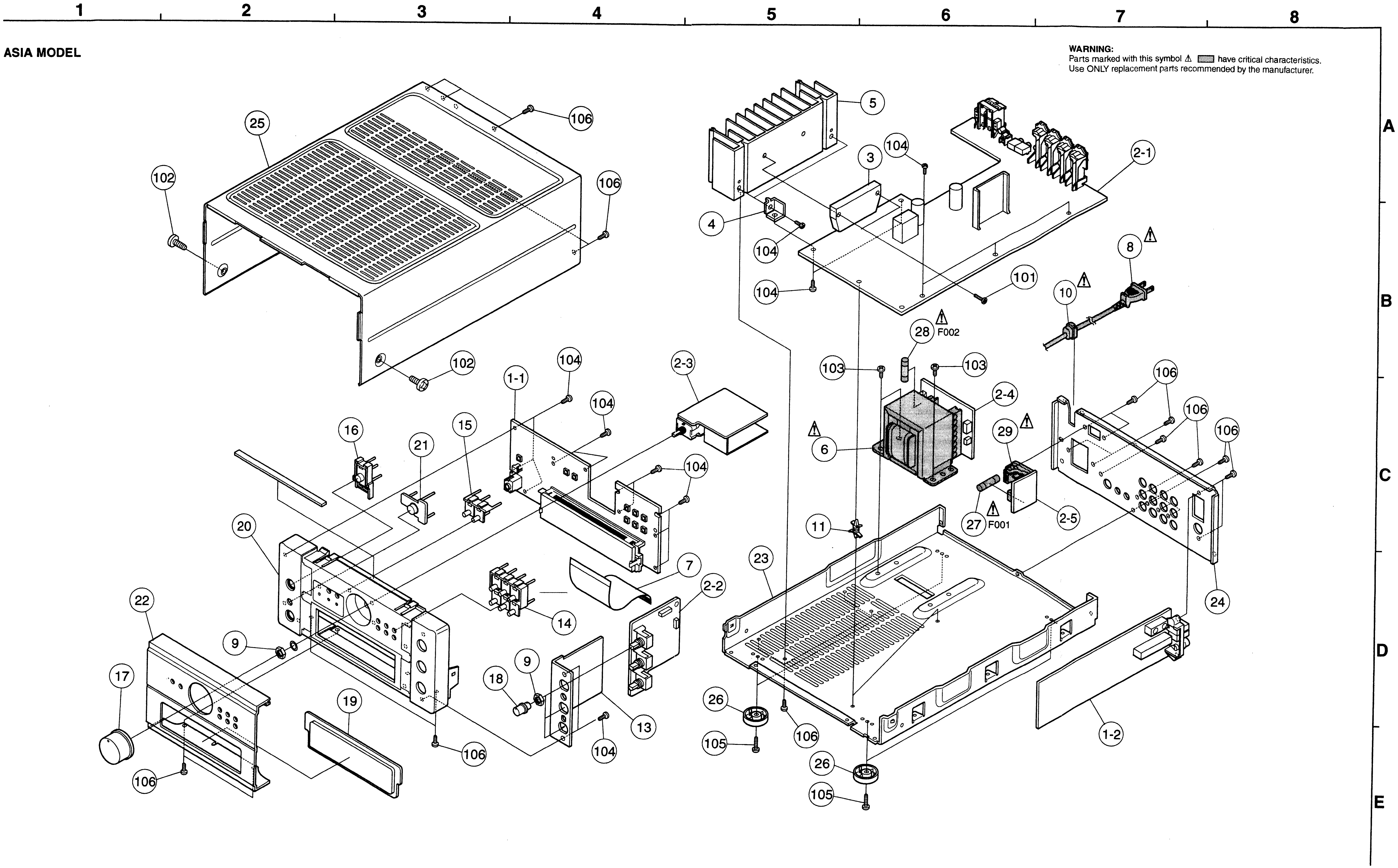
106
106

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

ASIA MODEL

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.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D
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106
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102
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104
2-1
4
104
104
8
101
10
28
F002
103
103
2-4
6
29
27
F001
2-5
11
106
106
106
24
104
1-1
104
2-3
16
15
21
104
20
7
14
2-2
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1-2

RECEIVER SECTION

PARTS LIST OF EXPLODED VIEW
RECEIVER SECTION (UDRA-M7)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	Note	Tuner / Display P.W.B. unit Ass'y		1s
1-1		Display unit		(1)
1-2		Tuner unit		(1)
2	Note	Main P.W.B. unit Ass'y		1s
2-1		Main unit		(1)
2-2		Tone unit		(1)
2-3		Volume unit		(1)
2-4		P.T unit		(1)
2-5		ACO unit		(1)
3	9LCP04522	IC STK405-050A	IC501	1
4		P.W.B.bracket		2
5		Heat sink		1
⚠ 6	Note	Power trans.		1
7	9LEK00158	34P FFC wire	W101	1
⚠ 8	Note	AC cord		1
9	475 6138 002	NUT M9x0.75		4
⚠ 10	Note	AC cord bushing		1
11	9LM L004 41	P.W.B. support		2
12	9LM S002 11	Felt		4
13		Tone bracket		1
14	9LP C022 61	Function button		1
15	9LP C022 81	Display button		1
16	9LP C022 91	Power button		1
17	9LP C023 01	Volume knob ass'y		1
18	9LP C023 31	Tone knob		3
19	9LP H045 71	Clear panel		1
20	9LP H045 81	Front panel (RE)		1
21	9LP H046 11	Remocon window		1
22	Note	Front panel (AL)		1
23	9LQ A008 91	Bottom chassis		1
24	Note	Rear plate		1
25	9LQ A009 11	Top cover		1
26	9LQ J003 91	Foot		4
⚠ 27	Note	Fuse	F001	1
⚠ 28	Note	Fuse	F002	1
⚠ 29	Note	AC outlet	JK001	1
30	9LEK00235	7P FFC wire	W102 Europe/U.K. models	1
⚠★ 31	9LE P000 62	E.C. plug	U.K. model only	1
★ 32	9LP H046 01	RDS Indicator	Europe/U.K. models	1
★ 32	9LP H046 02	RDS Indicator	U.S.A./Canada models	1
★ 33		Caution label	U.S.A./Canada models	1
★ 34		Origin label	Asia model only	1
★ 35		Fuse caution label	U.S.A./Canada models	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
SCREWS & NUTS				
101	9L8 6914 14	Screw BT 3x14		2
102		Screw 4x4 DT BIND B		2
103		Screw 4x6 DT BIND B		4
104	9L8 6914 10	Screw BH BT 3x10		18
105	9L8 6994 08	Screw BH BT 3x8 BBC		4
106	9L8 6994 10	Screw BH BT 3x10 BBC		23
PACKING & ACCESSORIES (Not included EXPLODED VIEW.)				
201		UPC label	U.S.A./Canada models	1
202		Warranty card	U.S.A./Canada models	1
203	Note	Carton box		1
204	9LS P045 91	Cushion (CD)	for UDCM-M7	2
205	9LS P046 01	Cushion (RE)	for UDRA-M7	2
206	Note	Pory sack	for set	2
207		Origin label (S)	Asia model only	1
208		Poly bag		2
209	9LE F021 32	FM antenna connector		1
210	9LE W034 81	US pin cord		1
211	9LE W034 91	System cord		1
212	Note	Remote control unit		1
213	Note	Instruction manual		1
214	9L2 7132 25	1P US pin cord L=2000	Asia model only	1
215	9L2 7593 41	AM loop antenna		1
216		Battery		1s
217	Note	Poly sack	for accessories	1

ADDENDUM PARTS LIST
PARTS LIST OF EXPLODED VIEW

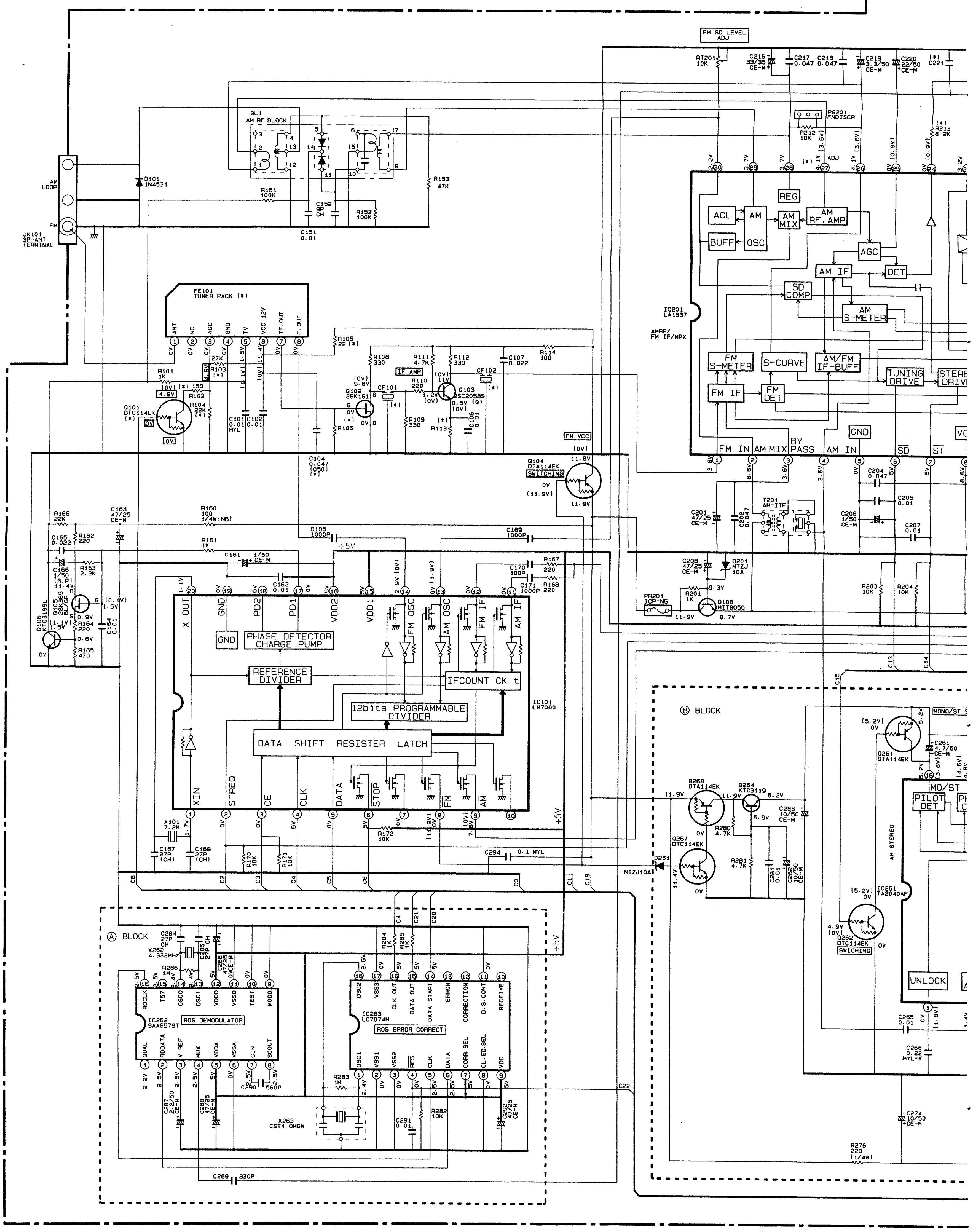
Ref. No.	Part Name	Part No.	Part No.	Part No.	Part No.
		U.S.A/Canada	Europe	U.K.	Asia
1	Tuner / Display P.W.B. unit Ass'y	9LJ T069 91	9LJ T069 92	9LJ T069 93	9LJ T069 96
2	Main P.W.B. unit Ass'y	9LJ T070 01	9LJ T070 02	9LJ T070 03	9LJ T070 06
⚠ 6	Power trans.	9LB T008 12	9LB T008 13	9LB T008 13	9LB T008 13
⚠ 8	AC cord	9LE V004 42	9LE V004 43	9LE V004 43	9LE V004 43
⚠ 10	AC cord bushing	9L3 8722 71	9LM L000 61	9LM L000 61	9LM L000 61
22	Front panel (AL)	9LP M048 71	9LP M048 72	9LP M048 72	9LP M048 73
24	Rear plate	9LQ A009 01	9LQ A009 02	9LQ A009 02	9LQ A009 03
⚠ 27	Fuse 1.6A 125V (F001)	9L2 7224 13	—	—	—
⚠ 27	Fuse T1A (F001)	—	9L2 7280 77	9L2 7280 77	9L2 7280 77
⚠ 28	Fuse 1.6A 125V (F002)	9L2 7224 13	—	—	—
⚠ 28	Fuse T1A (F002)	—	9L2 7280 77	9L2 7280 77	9L2 7280 77
⚠ 29	AC outlet	9LE P001 32	9LE P000 91	9LE P000 91	9LE P000 91
PACKING AND ACCESSORIES					
203	Carton box	9LS G064 51	9LS G064 52	9LS G064 52	9LS G064 53
206	Pory sack	9LS U010 21	9LS U010 21	9LS U010 20	9LS U010 21
212	Remote control unit RC828	9LH L009 01	9LH L009 01	9LH L009 01	—
212	Remote control unit RC831	—	—	—	9LH L009 02
213	Instruction manual	9LQ R216 11	9LQ R216 12	9LQ R216 12	9LQ R216 14
217	Poly sack	9L3 6402 14W	9L3 6402 14W	9L3 6402 13W	9L3 6402 14W

SCHEMATIC DIAGRAM (1/2)

1 2 3 4 5

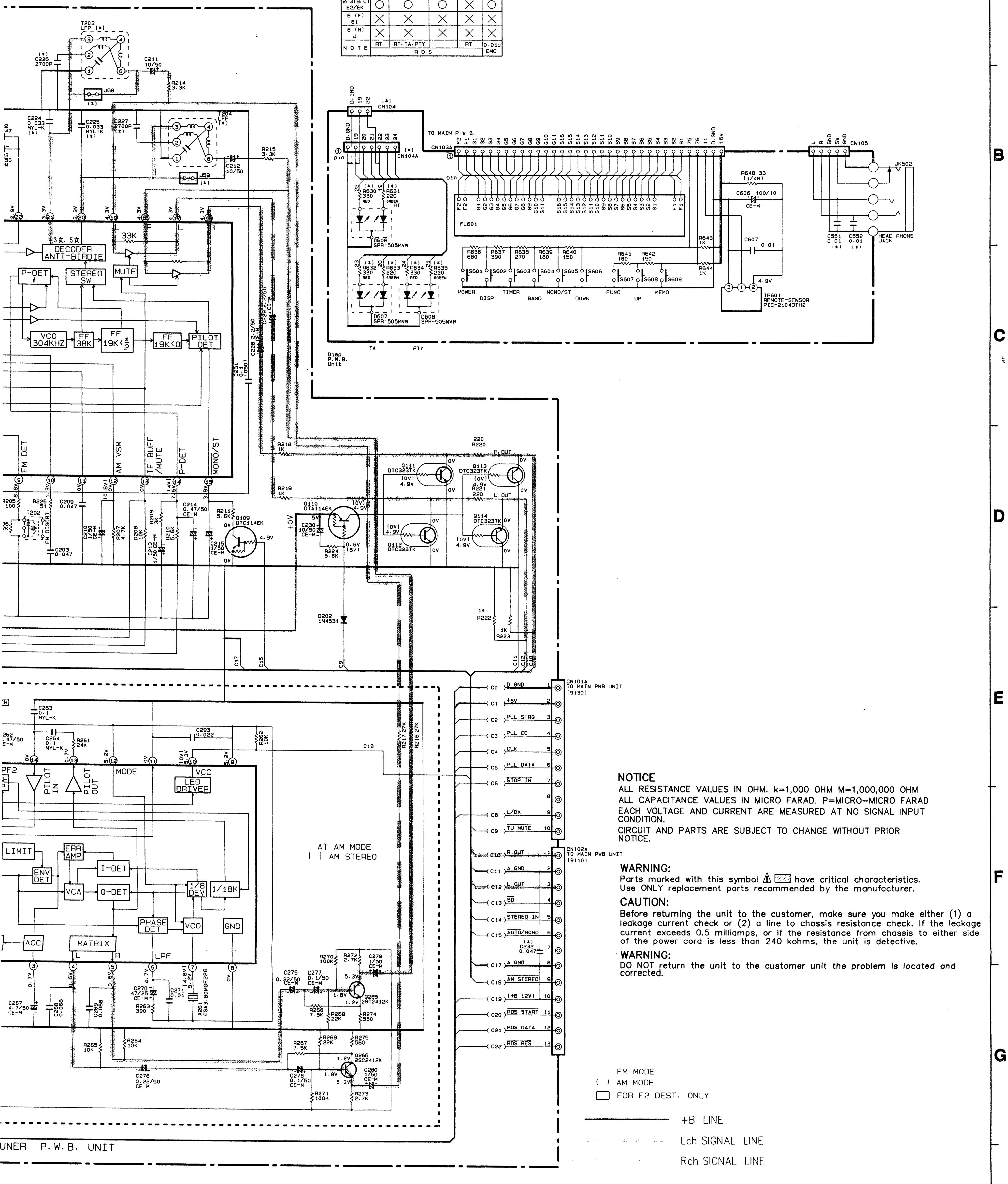
TUNER PWB ASS' Y UNIT TABLE OF DIFFERENCE TUN. DISP(CICUIT)

P#/D#	R102	R103	R104	Q101	R105	CF101	CF102	FE101	T203 T204	J58 J59	C226 C227	R212	C224 C225	C221	A-BLOCK	B-BLOCK	C222	R213	C104	R113	R106	C232	
1 (A) E3	╳	╳	╳	╳	22	SFE10.7 MA-8	SFE10.7 MS2G-A	3-TUNE	╳	○	╳	6.8K	0.047	560P	○	╳	○	○	○	2.7K	1K	╳	
2, 3 (B, C)E2	○	○	○	○	22	SFT10.7 MS2-A	SFT10.7 MS2-A	4-TUNE	○	╳	○	10K	0.033	560P	○	╳	○	○	╳	390	390	╳	
6 (F) E1	╳	╳	╳	╳	22	SFE10.7 MA-8	SFE10.7 MS2G-A	3-TUNE	╳	○	╳	10K	0.033	1000P	╳	╳	○	○	○	2.7K	1K	╳	
8 (H) J	╳	╳	╳	╳	150	SFE10.7 MA-8	SFE10.7 MS2G-A	3-TUNE	╳	○	╳	6.8K	0.033	1000P	╳	○	╳	╳	╳	220	390	○	
NOTE	FM AGC				(+B)FILTER	BAND-Width		FRONT END	FM 19kHz LPF			MUTE-BAND-Width	DE-EMPHASIS	SEPARATION	RDS	AM STEREO			FM IF				


AM LOOP
FM
JK101 3P-ANT TERMINAL
D101 1N4531
BL1 AM RF BLOCK
R151 100K
C151 0.01
C152 9P CH
R152 100K
R153 47K
FE101 TUNER PACK (*)
ANT
NC
AGC
GND
TV
VCC 12V
IF. OUT
F. OUT
R101 1K
R102
R103 (*)
R104 22K (*)
27K
150
4.9V
Q101 DTC114EK (*)
C101 0.01 MYL
C102 0.01
R105 22 (*)
R106
R108 330
R109 330
R110 220
R111 4.7K
R112 330
R113
R114 100
C104 0.047 (050) (*)
C106 0.01
C107 0.022
Q102 2SK161
CF101
CF102
IF AMP
Q103 2SC2058S (Q)
FM VCC
Q104 DTA114EK
SWITCHING
11.8V
11.9V
R160 100 1/4W (NB)
R161 1K
R162 220
R163 2.2K
R164 220
R165 470
R166 22K
C105 1000P
C161 1/50 CE-M
C162 0.01
C163 47/25 CE-M
C164 0.01
C165 0.022
C166 1/50 (B.P)
C167 27P (CH)
C168 27P (CH)
C169 1000P
C170 100P
C171 1000P
R167 220
R168 220
R170 10K
R171 10K
R172 10K
Q105 2SK365 BL/GR
Q106 KTC3199L
X101 7.2M
+5V
X OUT
GND
PD2
PD1
VDD2
VDD1
FM OSC
AM OSC
FM IF
AM IF
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
IFCOUNT CK t
12bits PROGRAMMABLE DIVIDER
DATA SHIFT RESISTER LATCH
XIN
STREQ
CE
CLK
DATA
STOP
FM
AM
IC101 LM7000
C294 0.1 MYL
C0
C1
C2
C3
C4
C5
C6
C8
C19
C20
C21
C22
Ⓐ BLOCK
C284 27P CH
C285 27P CH
C286 47/25 CE-M
X262 4.332MHz
R286 1M
RDCLK
T57
OSC0
OSC1
VDDD
VSSD
TEST
MODO
IC262 SAA6579T
RDS DEMODULATOR
QUAL
RDDATA
V REF
MUX
VDDA
VSSA
CIN
SCOUT
C287 2.2/50 CE-M
C288 47/25 CE-M
C289 330P
C290 560P
R284 1K
R285 1K
OSC2
VSS3
CLK OUT
DATA OUT
DATA START
ERROR
CORRECTION
D.S.CONT
RECEIVE
IC263 LC7074M
RDS ERROR CORRECT
OSC1
VSS1
VSS2
RES
CLK
DATA
CORR.SEL
CL.ED.SEL
VDD
R283 1M
X263 CST4.0MGW
C291 0.01
R282 10K
C292 47/25 CE-M
FM SD LEVEL ADJ
RT201 10K
C216 33/35 CE-M
C217 0.047
C218 0.047
C219 3.3/50 CE-M
C220 22/50 CE-M
(*) C221
PG201 FMDISCR
R212 10K
(*) R213 8.2K
ADJ
REG
ACL
AM OSC
BUFF
AM MIX
AM RF. AMP
AGC
AM IF
DET
SD COMP
AM S-METER
IC201 LA1837
AMRF/ FM IF/MPX
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STERE DRIVE
FM IF
FM DET
GND
FM IN
AM MIX
BY PASS
AM IN
SD
ST
C201 47/25 CE-M
C202 0.047
T201 AM-ITF
C204 0.047
C205 0.01
C206 1/50 CE-M
C207 0.01
C208 47/25 CE-M
D201 MTZJ 10A
PR201 ICP-N5
R201 1K
Q108 HIT8050
9.3V
8.7V
R203 10K
R204 10K
C13
C14
C15
Ⓑ BLOCK
MONO/ST
Q261 DTA114EK
C261 4.7/50 CE-M
MO/ST
PILOT DET
AM STEREO
IC261 TA2040AF
UNLOCK
Q262 DTC114EK
SWICHING
Q264 KTC3119
Q267 DTC114EK
Q268 DTA114EK
D261 MTZJ10A
R280 4.7K
R281 4.7K
C281 0.01
C282 10/50 CE-M
C283 10/50 CE-M
C265 0.01
C266 0.22 MYL-K
C274 10/50 CE-M
R276 220 (1/4W)

DISP. PWB ASS' Y UNIT TABLE OF DIFFERNCE

P#/D#	D606 R630 R631	R632〜R635 D607 D608	CN104A (7PFFC)	CN104 (3PMX)	C551 C552
1 (A) E3	○	×	×	○	×
2, 3(B, C) E2/EK	○	○	○	×	○
6 (F) E1	×	×	×	×	×
8 (H) J	×	×	×	×	×
N O T E	RT	RT, TA, PTY		RT	0.01u EMC
	R D S				



T203 LFP
T204 LFP
DECODER ANTI-BIRDIE
P-DET
STEREO SW
MUTE
VCO 304KHZ
FF 38K
FF 19K
FF 19K
PILOT DET
FM DET
AM VSM
IF BUFF /MUTE
P-DET
MONO/ST
TO MAIN P.W.B.
CN104
CN104A
CN103A
FL601
D606 SPR-505MVW
D607 SPR-505MVW
D608 SPR-505MVW
S601 POWER
S602 DISP
S603 TIMER
S604 BAND
S605 MONO/ST
S606 DOWN
S607 FUNC
S608 UP
S609 MEMO
IR601 REMOTE-SENSOR PIC-21043TH2
CN105
JK502
HEAD PHONE JACK
Disp P.W.B. Unit
TA
PTY
Q109 DTC114EK
Q110 DTA114EK
Q111 DTC323TK
Q112 DTC323TK
Q113 DTC323TK
Q114 DTC323TK
R OUT
L OUT
D202 1N4531
CN101A TO MAIN PWB UNIT (9130)
D GND
+5V
PLL STRO
PLL CE
CLK
PLL DATA
STOP IN
L/DX
TU MUTE
CN102A TO MAIN PWB UNIT (9110)
R OUT
A GND
L OUT
SD
STEREO IN
AUTO/MONO
A GND
AM STEREO
(+B 12V)
RDS START
RDS DATA
RDS RES
PF2
PILOT IN
PILOT OUT
MODE
VCC
LED DRIVER
LIMIT
ERR AMP
ENV DET
I-DET
VCA
Q-DET
1/8 DEV
1/18K
PHASE DET
VCO
GND
AGC
MATRIX
LPF
AT AM MODE
( ) AM STEREO
Q265 2SC2412K
Q266 2SC2412K
X261 CSA3.60MGF228
UNER P.W.B. UNIT

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

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WARNING:

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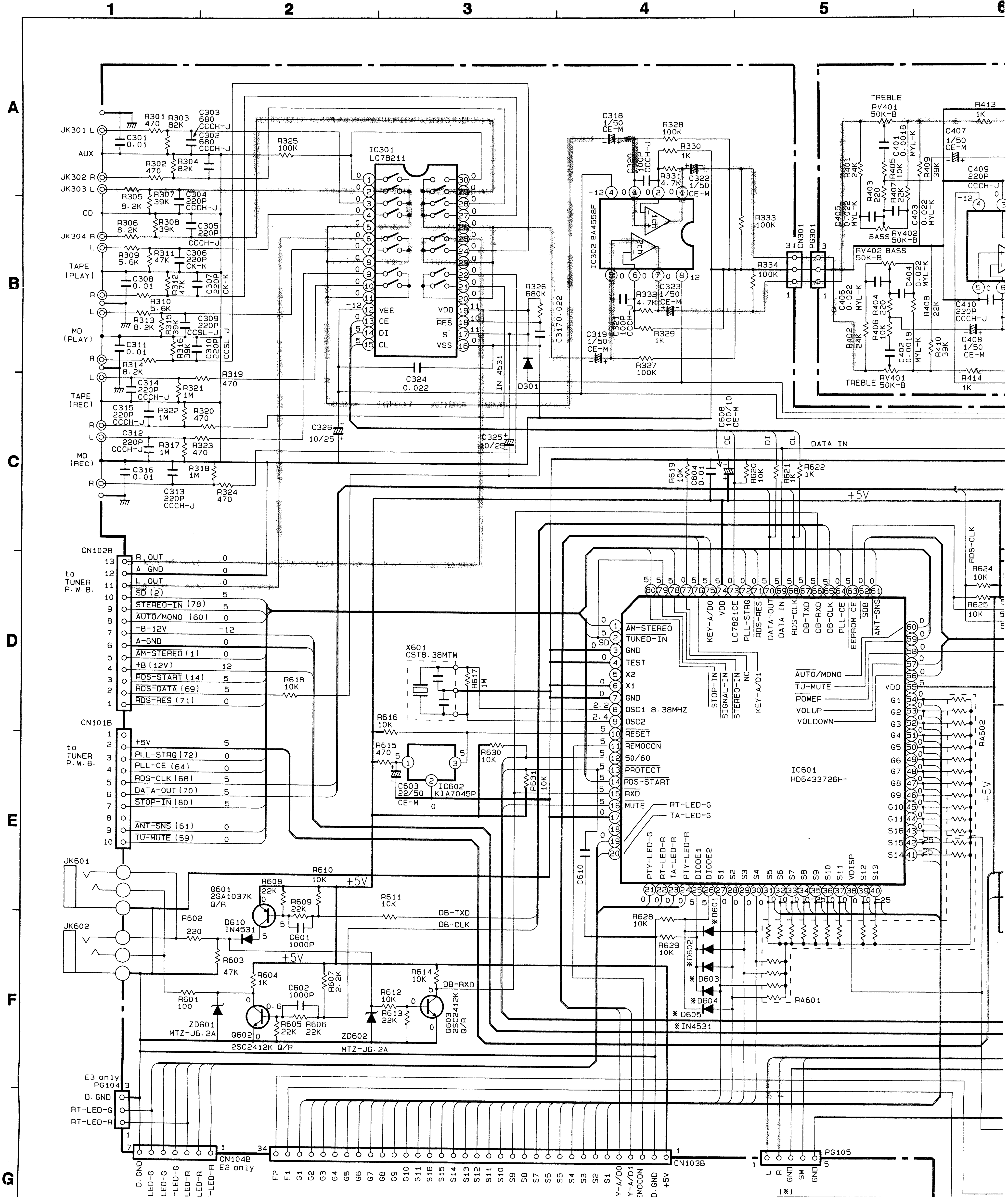
FM MODE
( ) AM MODE
☐ FOR E2 DEST. ONLY

+B LINE
Lch SIGNAL LINE
Rch SIGNAL LINE

RECEIVER SECTION

SCHEMATIC DIAGRAM (2/2)


1
2
3
4
5
6
A
B
C
D
E
F
G
H
JK301 L
AUX
JK302 R
JK303 L
CD
JK304 R
TAPE (PLAY)
MD (PLAY)
TAPE (REC)
MD (REC)
R301 470
R303 82K
C303 680 CCCH-J
C301 0.01
C302 680 CCCH-J
R302 470
R304 82K
R305 8.2K
R307 39K
C304 220P CCCH-J
R306 8.2K
R308 39K
C305 220P CCCH-J
R309 5.6K
R311 47K
C306 220P CK-K
C308 0.01
R312 47K
C307 220P CK-K
R310 5.6K
R313 8.2K
R315 39K
C309 220P CCSL-J
C311 0.01
R316 39K
C310 220P CCSL-J
R314 8.2K
R319 470
C314 220P CCCH-J
R321 1M
C315 220P CCCH-J
R322 1M
R320 470
C312 220P CCCH-J
R317 1M
R323 470
C316 0.01
R318 1M
C313 220P CCCH-J
R324 470
R325 100K
IC301 LC78211
VEE
CE
DI
CL
VDD
RES
S
VSS
C324 0.022
C326 10/25
C325 10/25
R326 680K
C317 0.022
IN 4531
D301
C318 1/50 CE-M
R328 100K
R330 1K
C320 100P CCCH-J
R331 4.7K
C322 1/50 CE-M
IC302 BA4558F
R333 100K
R334 100K
C323 1/50 CE-M
R332 4.7K
C321 100P CCCH-J
C319 1/50 CE-M
R329 1K
R327 100K
CN301
PG301
TREBLE
RV401 50K-B
R413 1K
C407 1/50 CE-M
R401 24K
R403 220
C401 0.0018 MYL-K
R405 10K
R407 22K
R409 39K
C409 220P CCCH-J
C405 0.022 MYL-K
C403 0.022 MYL-K
BASS RV402 50K-B
RV402 BASS 50K-B
C406 0.022 MYL-K
C404 0.022 MYL-K
R404 220
R408 22K
C410 220P CCCH-J
R402 24K
R406 10K
C402 0.0018 MYL-K
R410 39K
C408 1/50 CE-M
TREBLE RV401 50K-B
R414 1K
C608 100/10 CE-M
CE
DI
CL
DATA IN
R619 10K
C604 0.01
R620 10K
R621 1K
R622 1K
+5V
RDS-CLK
R624 10K
R625 10K
CN102B
to TUNER P.W.B.
R OUT
A GND
L OUT
SD (2)
STEREO-IN (78)
AUTO/MONO (60)
-B-12V
A-GND
AM-STEREO (1)
+B (12V)
RDS-START (14)
RDS-DATA (69)
RDS-RES (71)
R618 10K
CN101B
to TUNER P.W.B.
+5V
PLL-STRQ (72)
PLL-CE (64)
RDS-CLK (68)
DATA-OUT (70)
STOP-IN (80)
ANT-SNS (61)
TU-MUTE (59)
X601 CST8.38MTW
R617 1M
R616 10K
R615 470
C603 22/50 CE-M
IC602 KIA7045P
R630 10K
R631 10K
C610
AM-STEREO
TUNED-IN
GND
TEST
X2
X1
GND
OSC1 8.38MHZ
OSC2
RESET
REMOCON
50/60
PROTECT
RDS-START
RXD
MUTE
RT-LED-G
TA-LED-G
KEY-A/D0
VDD
LC7821CE
PLL-STRQ
RDS-RES
DATA-OUT
DATA IN
RDS-CLK
DB-TXD
DB-RXD
DB-CLK
PLL-CE
EEPROM CE
SDB
ANT-SNS
STOP-IN
SIGNAL-IN
STEREO-IN
NC
KEY-A/D1
AUTO/MONO
TU-MUTE
POWER
VOLUP
VOLDOWN
IC601 HD6433726H-
PTY-LED-G
RT-LED-R
TA-LED-R
PTY-LED-R
DIODE1
DIODE2
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
VDISP
S12
S13
G1
G2
G3
G4
G5
G6
G7
G8
G9
G10
G11
S16
S15
S14
RA602
RA601
JK601
JK602
R610 10K
R608 22K
R609 22K
Q601 2SA1037K Q/R
R602 220
D610 IN4531
C601 1000P
R611 10K
DB-TXD
DB-CLK
R603 47K
R604 1K
C602 1000P
R607 2.2K
R614 10K
DB-RXD
R601 100
ZD601 MTZ-J6.2A
Q602 2SC2412K Q/R
R605 22K
R606 22K
R612 10K
R613 22K
ZD602 MTZ-J6.2A
Q603 2SC2412K Q/R
R628 10K
R629 10K
※D601
※D602
※D603
※D604
※D605
※IN4531
E3 only
PG104
D.GND
RT-LED-G
RT-LED-R
CN104B E2 only
TA-LED-G
PTY-LED-G
TA-LED-R
PTY-LED-R
CN103B
F2
F1
KEY-A/D0
KEY-A/D1
REMOCON
D.GND
+5V
PG105
L
R
GND
SW
GND

(※)

	E1	E2	E3	J
D601	×	×	×	○
D602	○	×	○	○
D603	○	○	×	×
D604	×	×	×	○
D605	×	○	○	×
C518~ C521	○	○	×	×
C523 C524	○	○	×	×

NOTICE

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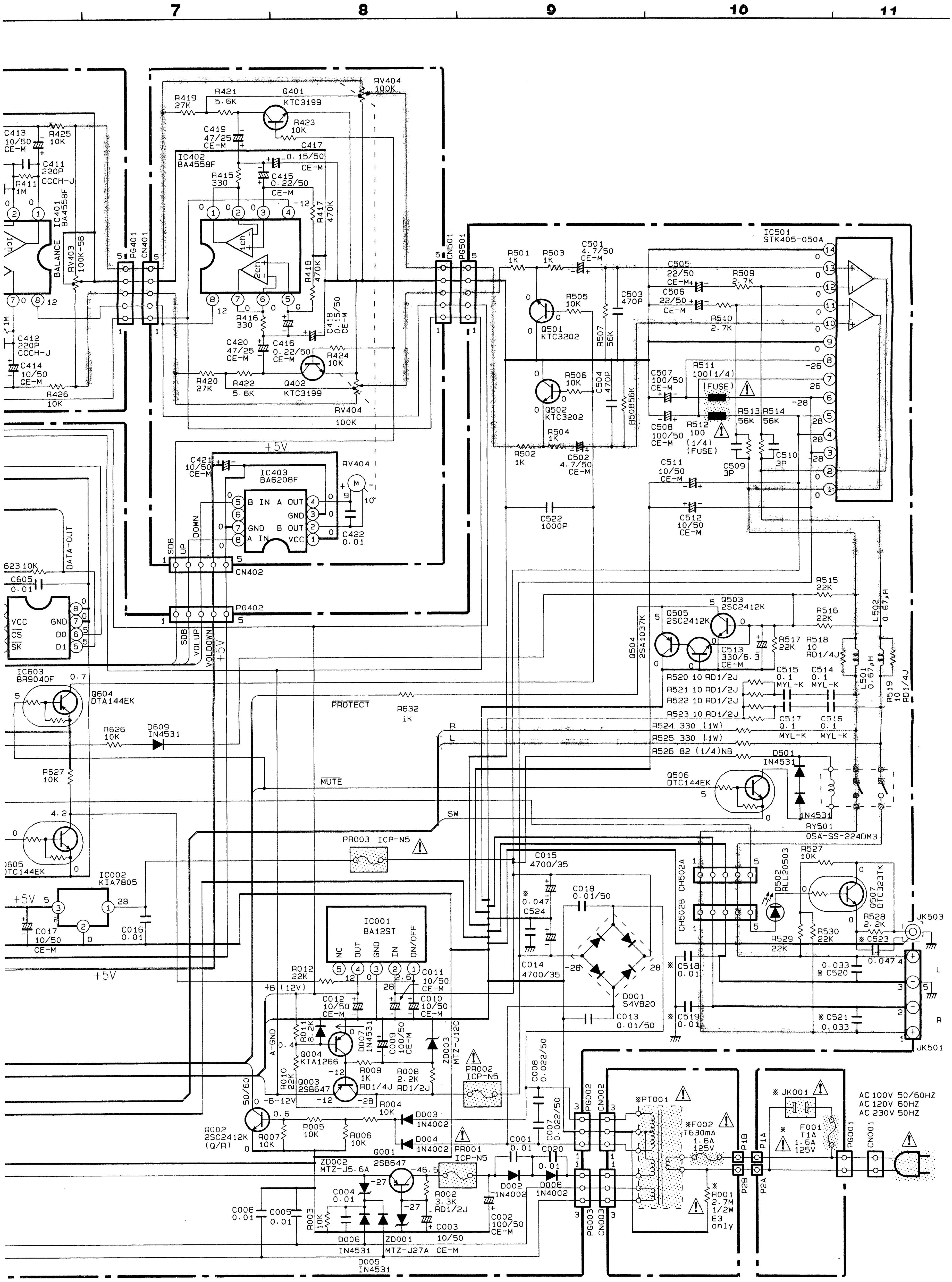

7
8
9
10
11
C413 10/50 CE-M
R425 10K
C411 220P CCCH-J
R411 1M
IC401 BA4558F
BALANCE
RV403 100K-5B
PG401
CN401
C412 220P CCCH-J
C414 10/50 CE-M
R426 10K
R419 27K
R421 5.6K
Q401 KTC3199
R423 10K
RV404 100K
C419 47/25 CE-M
IC402 BA4558F
R415 330
C417 0.15/50 CE-M
C415 0.22/50 CE-M
R417 470K
R418 470K
1ch
2ch
R416 330
C420 47/25 CE-M
C416 0.22/50 CE-M
C418 0.15/50 CE-M
R424 10K
R420 27K
R422 5.6K
Q402 KTC3199
RV404 100K
CN501
PG501
+5V
C421 10/50 CE-M
IC403 BA6208F
B IN A OUT
GND
GND B OUT
A IN VCC
RV404
M
C422 0.01
SDB
UP
DOWN
CN402
PG402
SDB
VOLUP
VOLDOWN
+5V
DATA-OUT
623 10K
C605 0.01
VCC GND
CS DO
SK D1
IC603 BR9040F
Q604 DTA144EK
R626 10K
D609 1N4531
R627 10K
Q605 DTC144EK
IC002 KIA7805
+5V
C017 10/50 CE-M
C016 0.01
+5V
PROTECT
R632 1K
MUTE
R
L
SW
PR003 ICP-N5
IC501 STK405-050A
R501 1K
R503 1K
C501 4.7/50 CE-M
C505 22/50 CE-M
R509 2.7K
C506 22/50 CE-M
R510 2.7K
R505 10K
Q501 KTC3202
C503 470P
R507 56K
R506 10K
Q502 KTC3202
C504 470P
R508 56K
R504 1K
R502 1K
C502 4.7/50 CE-M
C507 100/50 CE-M
R511 100(1/4) (FUSE)
C508 100/50 CE-M
R512 100 (1/4) (FUSE)
R513 56K
R514 56K
C509 3P
C510 3P
C511 10/50 CE-M
C512 10/50 CE-M
C522 1000P
R515 22K
R516 22K
Q503 2SC2412K
Q505 2SC2412K
Q504 2SA1037K
C513 330/6.3 CE-M
R517 22K
R518 10 RD1/4J
L502 0.67μH
L501 0.67μH
R519 10 RD1/4J
R520 10 RD1/2J
R521 10 RD1/2J
R522 10 RD1/2J
R523 10 RD1/2J
C515 0.1 MYL-K
C514 0.1 MYL-K
C517 0.1 MYL-K
C516 0.1 MYL-K
R524 330 (1W)
R525 330 (1W)
R526 82 (1/4)NB
D501 1N4531
Q506 DTC144EK
1N4531
RY501 OSA-SS-224DM3
CH502A
CH502B
D502 RLL20503
R527 10K
Q507 DTC323TK
R528 2.2K
JK503
C523 0.047
R529 22K
R530 22K
C518 0.01
C519 0.01
C520 0.033
C521 0.033
L
R
JK501
C015 4700/35
C018 0.01/50
C524 0.047
C014 4700/35
D001 S4VB20
C013 0.01/50
IC001 BA12ST
NC OUT GND IN ON/OFF
R012 22K
+B(12V)
C011 10/50 CE-M
C012 10/50 CE-M
C010 10/50 CE-M
A-GND
R011 8.2K
Q004 KTA1266
D007 1N4531
C009 100/50 CE-M
ZD003 MTZ-J12C
R010 22K
Q003 2SB647
R009 1K RD1/4J
R008 2.2K RD1/2J
PR002 ICP-N5
C008 0.022/50
C007 0.022/50
50/60
-B-12V
Q002 2SC2412K (Q/R)
R007 10K
R005 10K
R006 10K
R004 10K
D003 1N4002
D004 1N4002
PR001 ICP-N5
C001 0.01
C020 0.01
Q001 2SB647
ZD002 MTZ-J5.6A
C004 0.01
R002 3.3K RD1/2J
D002 1N4002
D008 1N4002
C002 100/50 CE-M
C003 10/50 CE-M
C006 0.01
C005 0.01
R003 10K
D006 1N4531
ZD001 MTZ-J27A
D005 1N4531
PG002
CN002
PG003
CN003
※PT001
※F002 T630mA 1.6A 125V
R001 2.7M 1/2W E3 only
P1B
P2B
P1A
P2A
※JK001
※F001 T1A 1.6A 125V
PG001
CN001
AC 100V 50/60HZ
AC 120V 60HZ
AC 230V 50HZ

	E1	E2	E3	J
F001	T1A	T1A	1.6A125V	1.6A125V
F002	T630mA	T630mA	1.6A125V	1.6A125V

+B LINE

Lch SIGNAL LINE

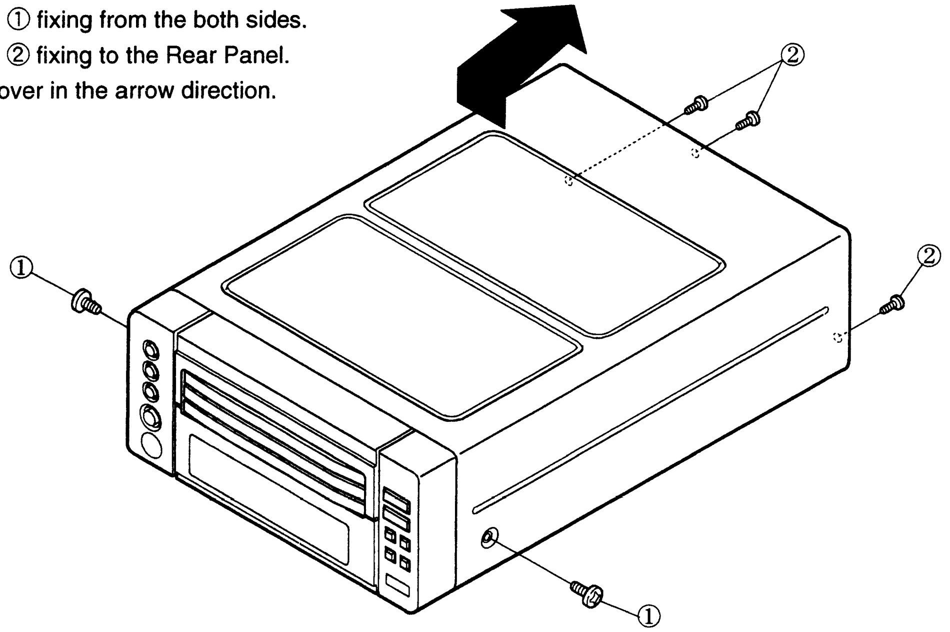
Rch SIGNAL LINE

DISASSEMBLY

(Follow in the reverse order for reassembly)

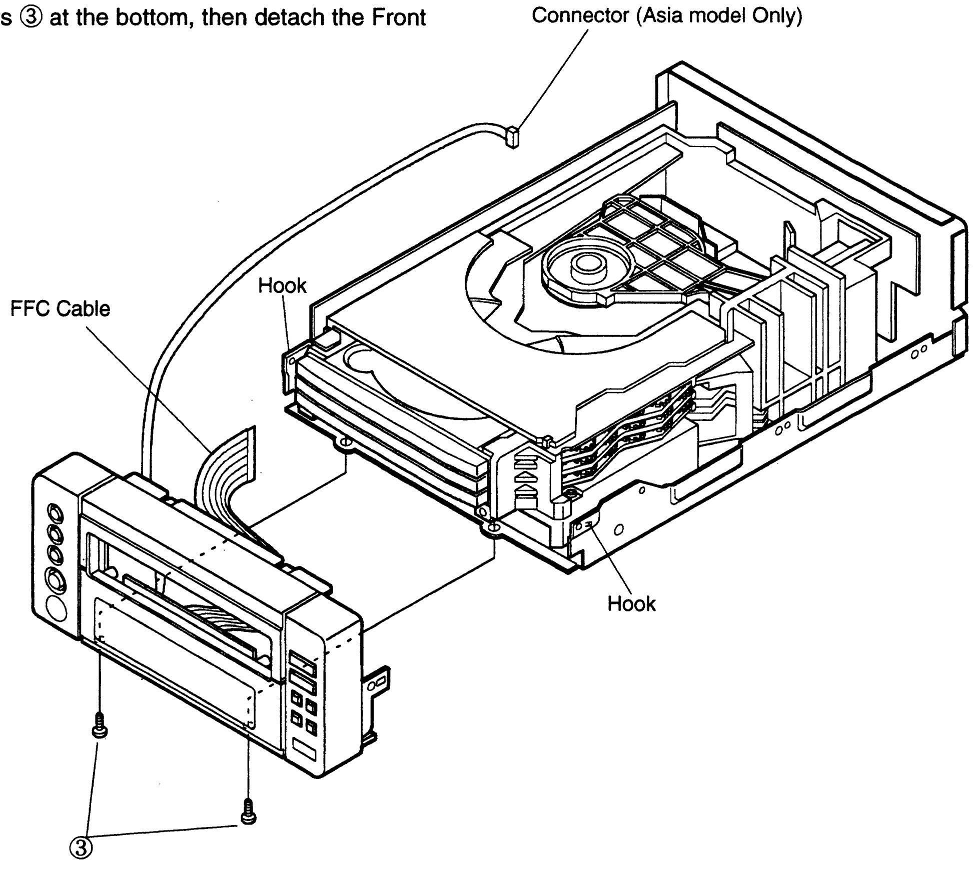
1. Top Cover

(1) Remove 2 screws ① fixing from the both sides.
(2) Remove 3 screws ② fixing to the Rear Panel.
(3) Detach the Top Cover in the arrow direction.



2. Front Panel

(1) Disconnect 1 FFC cable coming from the Front P.W.B.
(2) Disconnent 1 cord from the Front P.W.B. (Asia model only)
(3) Remove 2 screws ③ at the bottom, then detach the Front Panel.

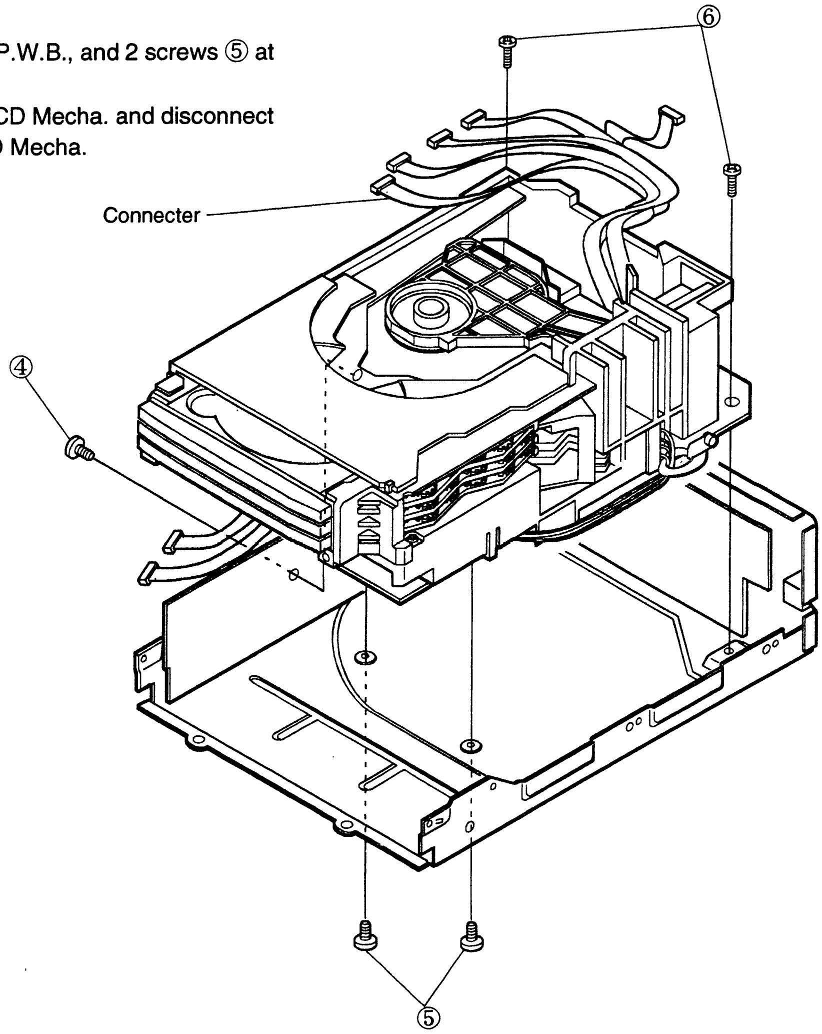

Connector (Asia model Only)
Hook
FFC Cable
Hook
③

CD PLAYER SECTION

3. CD Mecha. ASS'Y

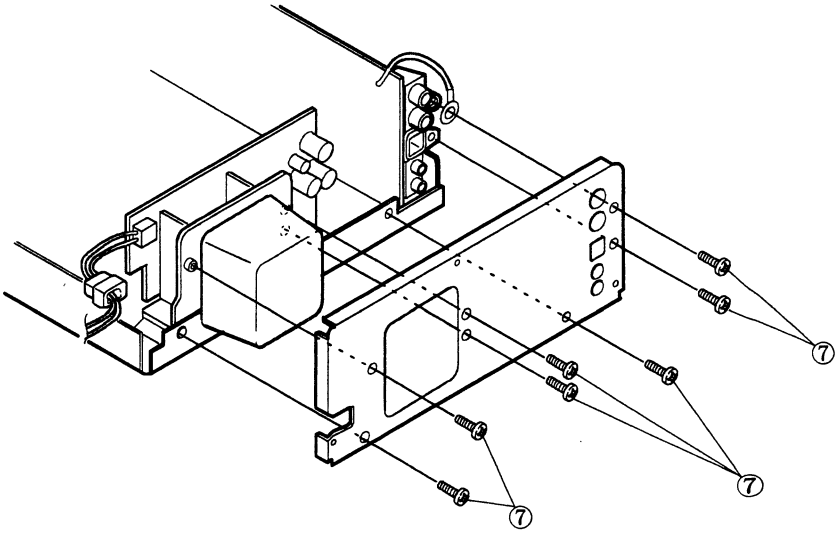
(1) Remove 1 screw ④ at the side P.W.B., and 2 screws ⑤ at the bottom.

(2) Remove 2 screws ⑥ fixing the CD Mecha. and disconnect the connectors, then detach CD Mecha.



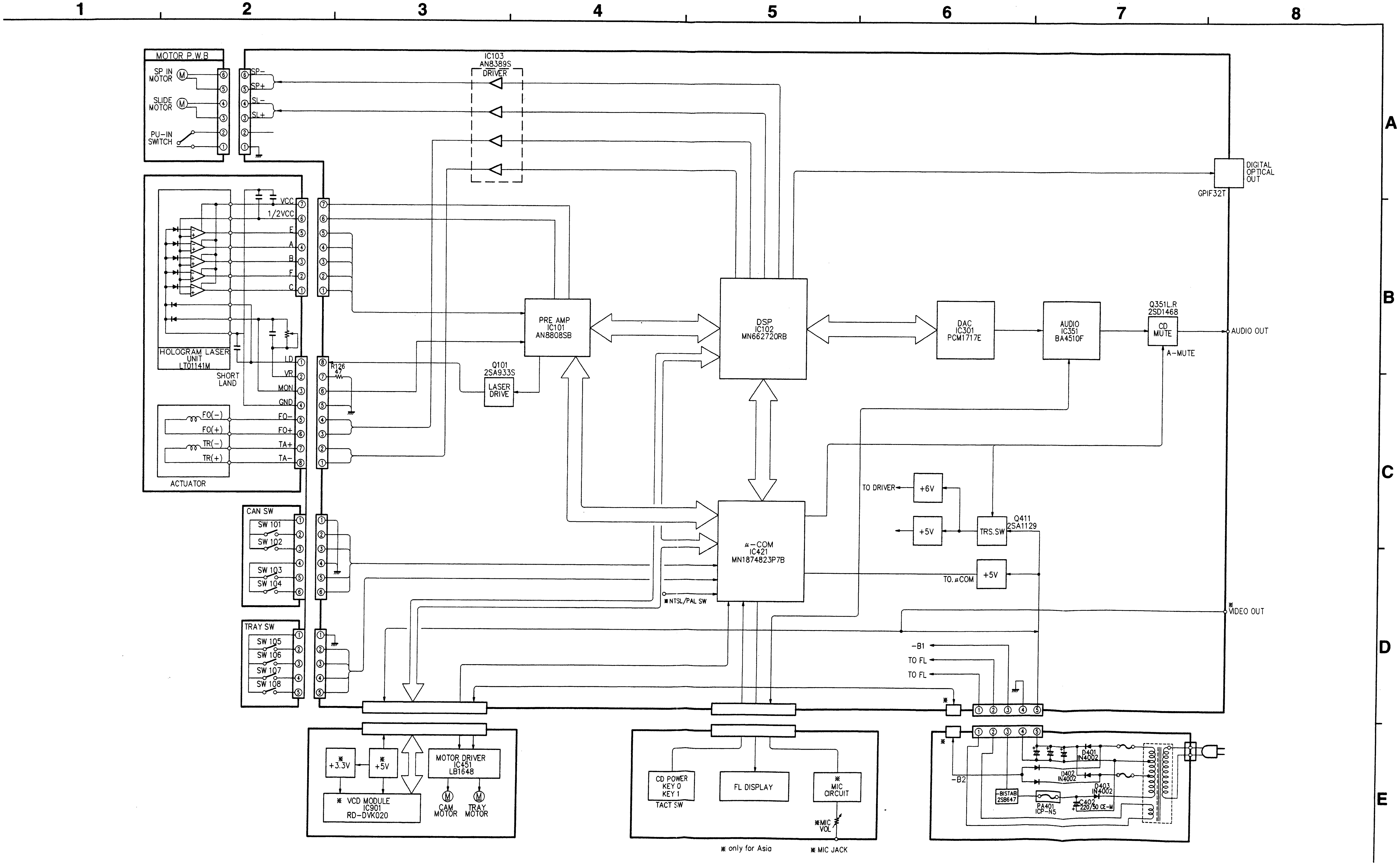
4. Rear Panel

(1) Remove 7 screws ⑦ , then detach the Rear Panel.



BLOCK DIAGRAM

CD PLAYER SECTION

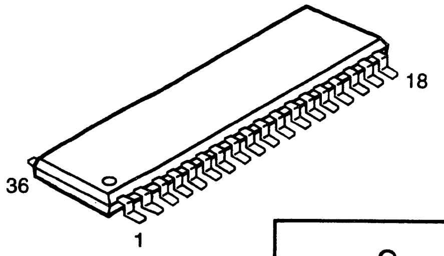

1
2
3
4
5
6
7
8
A
B
C
D
E
MOTOR P.W.B
SP IN MOTOR
SLIDE MOTOR
PU-IN SWITCH
SP-
SP+
SL-
SL+
IC103
AN8389S
DRIVER
VCC
1/2VCC
E
A
B
F
C
HOLOGRAM LASER UNIT
LT0114IM
SHORT LAND
LD
VR
MON
GND
FO-
FO+
TA+
TA-
FO(-)
FO(+)
TR(-)
TR(+)
ACTUATOR
R126
47
Q101
2SA933S
LASER DRIVE
PRE AMP
IC101
AN8808SB
DSP
IC102
MN662720RB
DAC
IC301
PCM1717E
AUDIO
IC351
BA4510F
Q351L,R
2SD1468
CD MUTE
A-MUTE
AUDIO OUT
DIGITAL OPTICAL OUT
GPIF32T
CAN SW
SW 101
SW 102
SW 103
SW 104
TRAY SW
SW 105
SW 106
SW 107
SW 108
μ-COM
IC421
MN1874823P7B
※NTSL/PAL SW
TO DRIVER
+6V
+5V
TRS.SW
Q411
2SA1129
TO. μCOM
+5V
※VIDEO OUT
-B1
TO FL
TO FL
※
※+3.3V
+5V
※ VCD MODULE
IC901
RD-DVK020
MOTOR DRIVER
IC451
LB1648
CAM MOTOR
TRAY MOTOR
CD POWER
KEY 0
KEY 1
TACT SW
FL DISPLAY
※MIC CIRCUIT
※MIC VOL
-B2
-BISTAB
2SB647
PA401
ICP-N5
C402
220/50 CE-M
D401
IN4002
D402
IN4002
D403
IN4002
※ only for Asia
※ MIC JACK

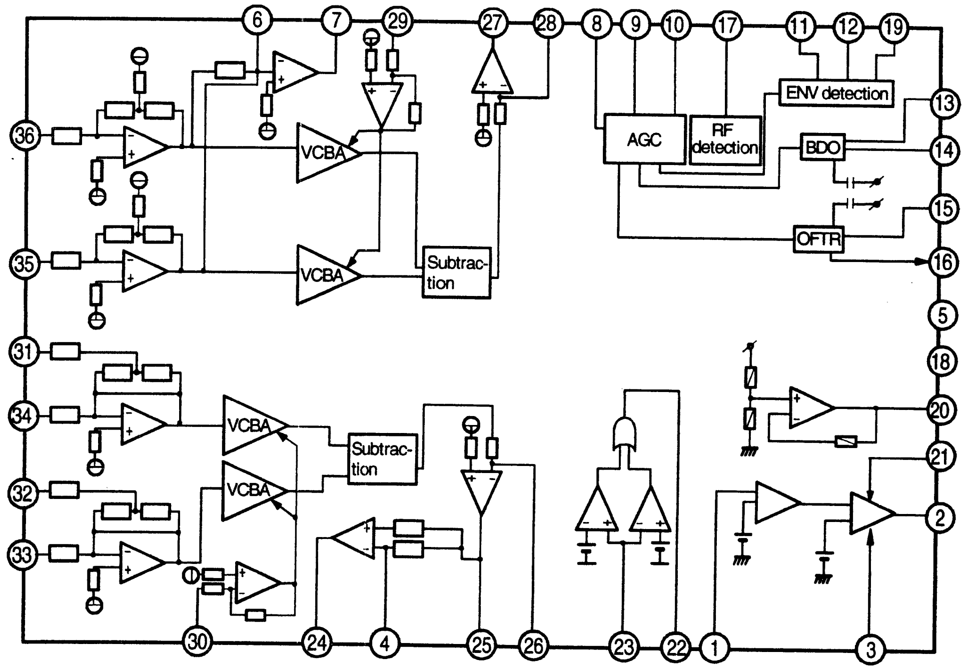
CD PLAYER SECTION

SEMICONDUCTORS

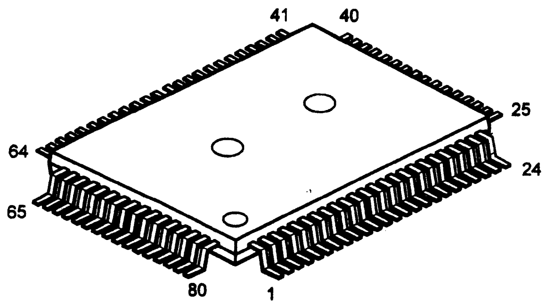
● IC's

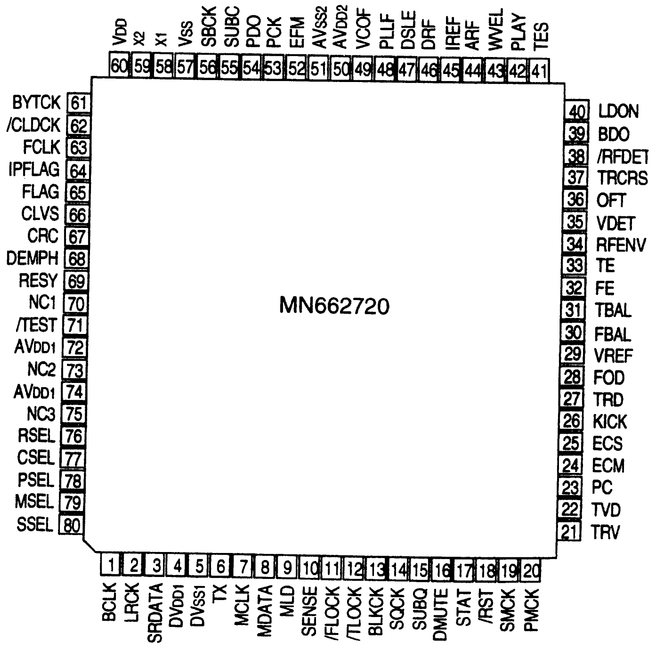
AN8808SB (IC101)



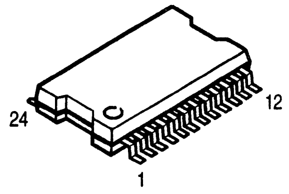

ENV detection
AGC
RF detection
BDO
OFTR
VCBA
VCBA
Subtraction
VCBA
VCBA
Subtraction
6
7
29
27
28
8
9
10
17
11
12
19
13
14
15
16
5
18
20
21
2
36
35
31
34
32
33
30
24
4
25
26
23
22
1
3

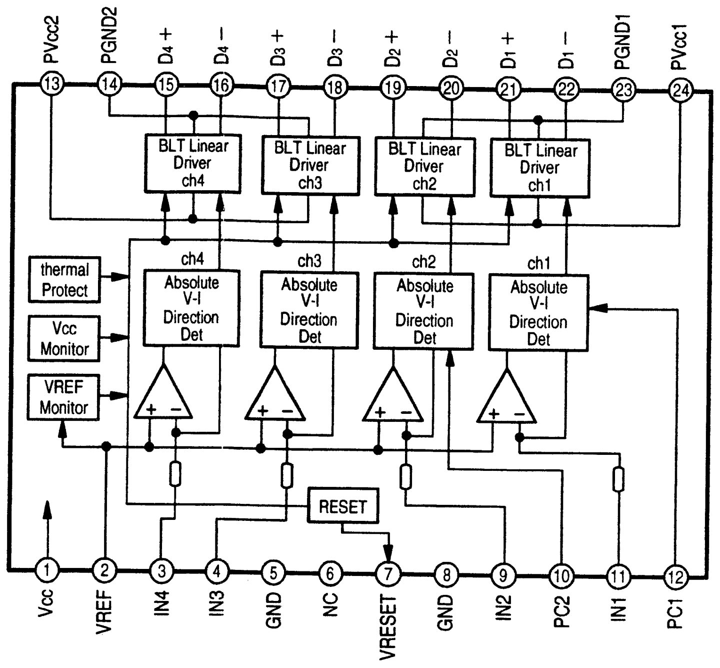
MN662720RB (IC102)


41
40
25
64
24
65
80
1

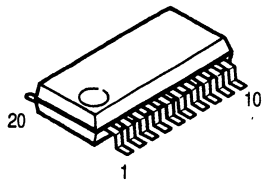

MN662720
60 VDD
59 X2
58 X1
57 VSS
56 SBCK
55 SUBC
54 PDO
53 PCK
52 EFM
51 AVSS2
50 AVDD2
49 VCOF
48 PLLF
47 DSLE
46 DRF
45 IREF
44 ARF
43 WVEL
42 PLAY
41 TES
40 LDON
39 BDO
38 /RFDET
37 TRCRS
36 OFT
35 VDET
34 RFENV
33 TE
32 FE
31 TBAL
30 FBAL
29 VREF
28 FOD
27 TRD
26 KICK
25 ECS
24 ECM
23 PC
22 TVD
21 TRV
61 BYTCK
62 /CLDCK
63 FCLK
64 IPFLAG
65 FLAG
66 CLVS
67 CRC
68 DEMPH
69 RESY
70 NC1
71 /TEST
72 AVDD1
73 NC2
74 AVDD1
75 NC3
76 RSEL
77 CSEL
78 PSEL
79 MSEL
80 SSEL
1 BCLK
2 LRCK
3 SRDATA
4 DVDD1
5 DVSS1
6 TX
7 MCLK
8 MDATA
9 MLD
10 SENSE
11 /FLOCK
12 /TLOCK
13 BLKCK
14 SQCK
15 SUBQ
16 DMUTE
17 STAT
18 /RST
19 SMCK
20 PMCK

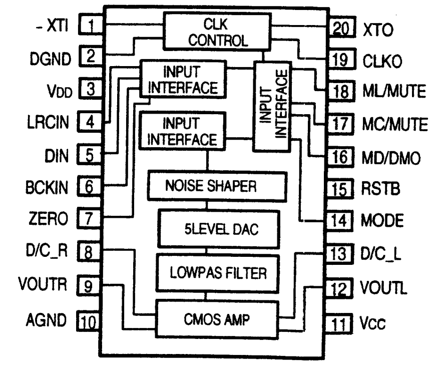
AN8389S (IC103)



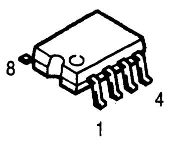

13 PVcc2
14 PGND2
15 D4 +
16 D4 −
17 D3 +
18 D3 −
19 D2 +
20 D2 −
21 D1 +
22 D1 −
23 PGND1
24 PVcc1
BLT Linear Driver ch4
BLT Linear Driver ch3
BLT Linear Driver ch2
BLT Linear Driver ch1
thermal Protect
Vcc Monitor
VREF Monitor
ch4 Absolute V-I Direction Det
ch3 Absolute V-I Direction Det
ch2 Absolute V-I Direction Det
ch1 Absolute V-I Direction Det
RESET
1 Vcc
2 VREF
3 IN4
4 IN3
5 GND
6 NC
7 VRESET
8 GND
9 IN2
10 PC2
11 IN1
12 PC1

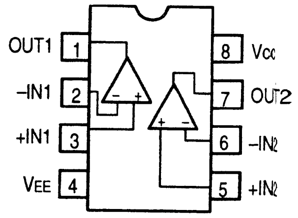
PCM1717E (IC301)



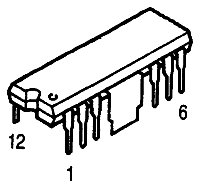

1 -XTI
2 DGND
3 VDD
4 LRCIN
5 DIN
6 BCKIN
7 ZERO
8 D/C_R
9 VOUTR
10 AGND
20 XTO
19 CLKO
18 ML/MUTE
17 MC/MUTE
16 MD/DMO
15 RSTB
14 MODE
13 D/C_L
12 VOUTL
11 Vcc
CLK CONTROL
INPUT INTERFACE
INPUT INTERFACE
INPUT INTERFACE
NOISE SHAPER
5LEVEL DAC
LOWPAS FILTER
CMOS AMP

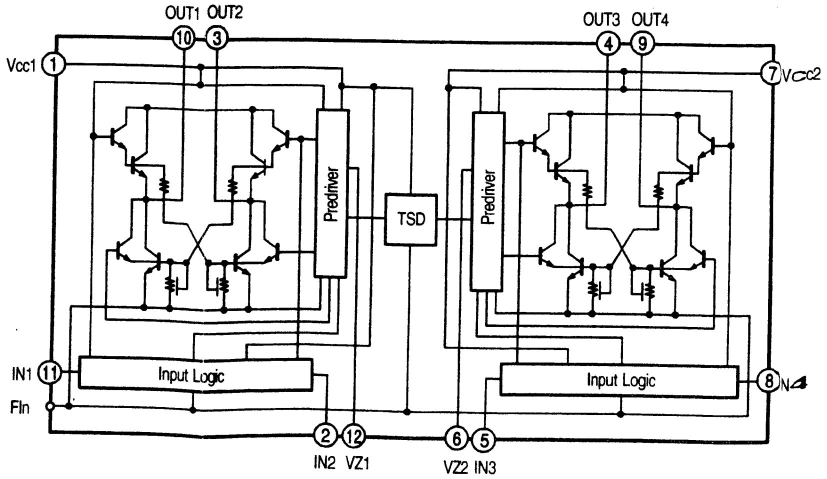
BA4510F (IC351)



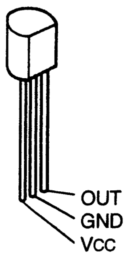

OUT1 1
−IN1 2
+IN1 3
VEE 4
8 Vcc
7 OUT2
6 −IN2
5 +IN2

LB1648 (IC451)

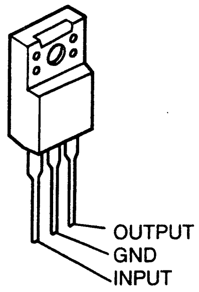



OUT1 OUT2
10 3
OUT3 OUT4
4 9
Vcc1 1
7 Vcc2
Predriver
TSD
Predriver
IN1 11
FIn
Input Logic
Input Logic
8 IN4
2 12
IN2 VZ1
6 5
VZ2 IN3

KIA7045P (IC422)

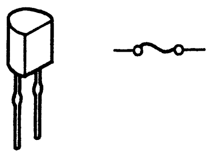


KIA7805PI (IC412, 413)
KIA9806PI (IC414)


OUTPUT
GND
INPUT

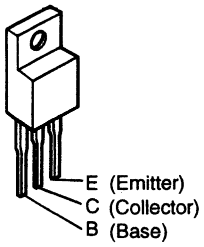
● IC PROTECTOR

ICP-N5 (PR401)

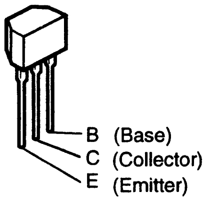


● TRANSISTOR

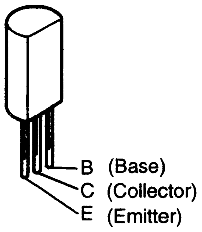
2SA1129 (K)


E (Emitter)
C (Collector)
B (Base)

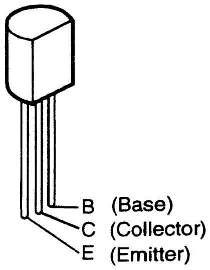
2SA933S (S)
2SD1468S (R)
2SC1740S (S)


B (Base)
C (Collector)
E (Emitter)

2SB647 (C)

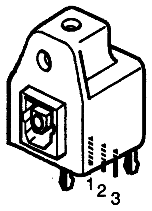

B (Base)
C (Collector)
E (Emitter)

2SA844 (E)

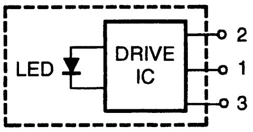

B (Base)
C (Collector)
E (Emitter)

● OPITAL DIGITAL OUTPUT

GP1F32T (IC201)

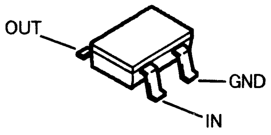


1. Vin
2. Vcc
3. GND

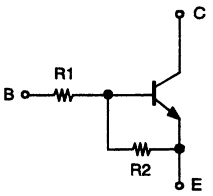

LED
DRIVE
IC
2
1
3

LED :Ga Al As
DRIVE IC :Silicon

DTC124EK

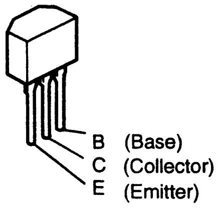


NPN Type



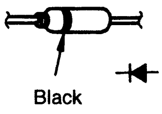
	R1	R2
DTC124EK	22 kohm	22 kohm

KTC3199L
KTA1267

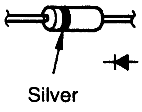

B (Base)
C (Collector)
E (Emitter)

● DIODE

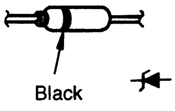
1N4531



1N4002



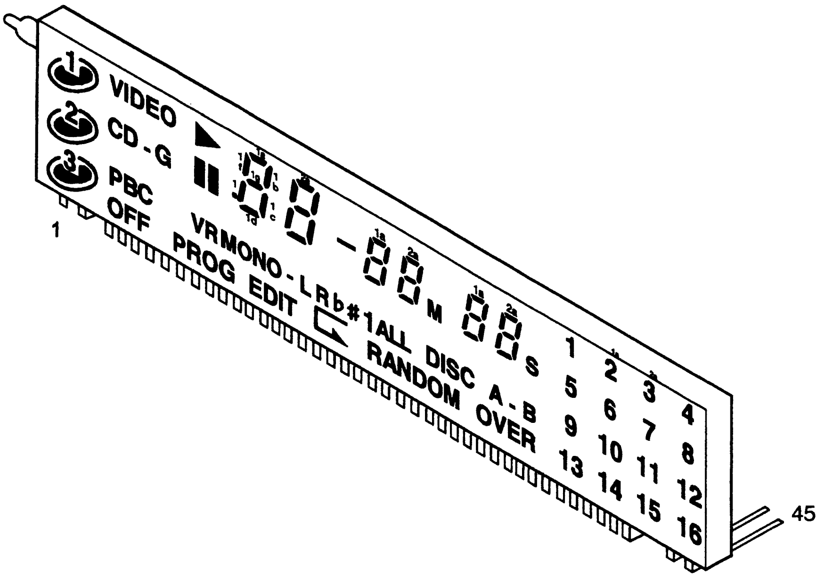
MTZJ2.7A MTZJ6.2A
MTZJ3.9B MTZJ27A
MTZJ5.6A



CD PLAYER SECTION

● FL DISPLAY 10-BT-151GK (FL801)

(Part No. : DD00071)


1
VIDEO
CD-G
PBC
OFF
VR
MONO-L R
PROG
EDIT
b#1ALL
DISC
RANDOM
A-B
OVER
M
S
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
45

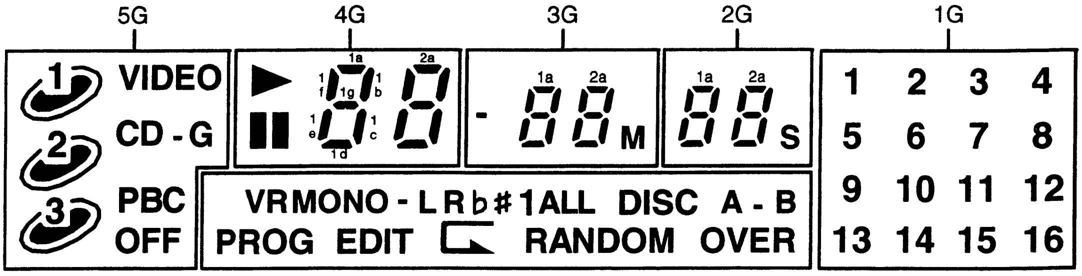
Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Connection	F1	F1	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	NX	NX	NX

Pin No.	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Connection	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	NX	6G	5G	4G	3G	2G	1G	NP	NP	F2	F2

NOTE
1) F1,F2 -------------- Filament
2) NP ---------------- No Pin
3) NX ---------------- No Extension
4) DL ---------------- Datum Line
5) 1G~6G --------- Grid
6) Visible Angle (MIN) : 33° (Upper), 25° (Lower)

Grid Partition


5G
4G
3G
2G
1G
1
2
3
VIDEO
CD - G
PBC
OFF
1a
2a
1f
1g
1b
1e
1c
1d
M
S
VR MONO - L R b # 1 ALL DISC A - B
PROG EDIT RANDOM OVER
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16

Illumination Color

Reddish Orange -------------------- Above pattern ⬚ part

Green -------------------------------- Others

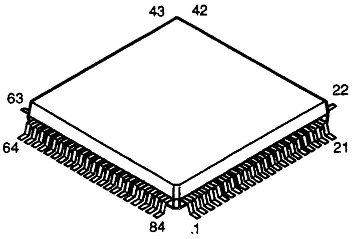
Anode Connection

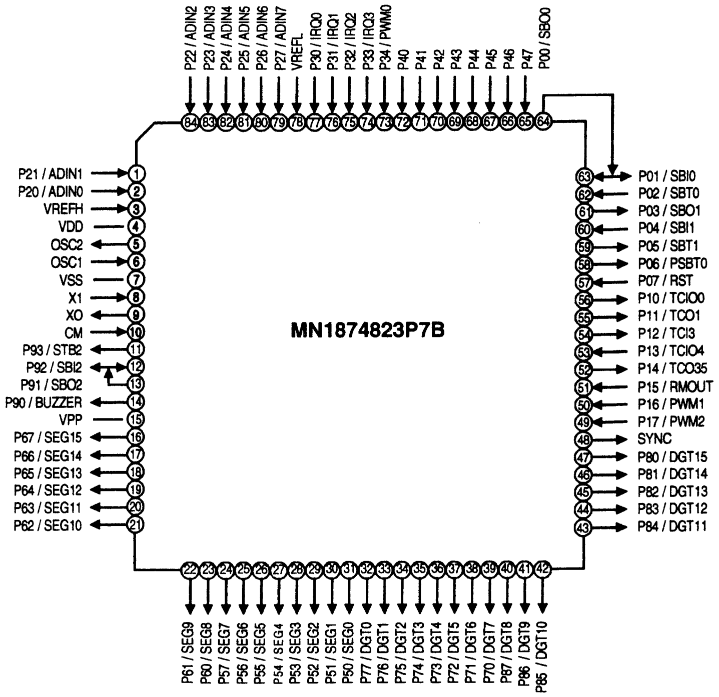
	6G	5G	4G	3G	2G	1G
P1	VR	1	1a	1a	1a	1
P2	MONO -	○ [1]	1b	1b	1b	2
P3	L	● [1]	1c	1c	1c	3
P4	R	2	1d	1d	1d	4
P5	1	○ [2]	1e	1e	1e	5
P6	ALL	● [2]	1 f	1 f	1 f	6
P7	DISC	3	1g	1g	1g	7
P8	A -	○ [3]	2a	2a	2a	8
P9	B	● [3]	2b	2b	2b	9
P10	PROG	VIDEO	2c	2c	2c	10
P11	EDIT	CD	2d	2d	2d	11
P12	↳	-G	2e	2e	2e	12
P13	RANDOM	PBC	2 f	2 f	2 f	13
P14	OVER	OFF	2g	2g	2g	14
P15	#	–	▶	-	–	15
P16	b	–	❚❚	M	S	16

CD PLAYER SECTION

MICROPROCESSOR DOCUMENTASION

MN1874823P7B (IC421)


43
42
63
22
64
21
84
1


MN1874823P7B
P21 / ADIN1
P20 / ADIN0
VREFH
VDD
OSC2
OSC1
VSS
X1
XO
CM
P93 / STB2
P92 / SBI2
P91 / SBO2
P90 / BUZZER
VPP
P67 / SEG15
P66 / SEG14
P65 / SEG13
P64 / SEG12
P63 / SEG11
P62 / SEG10
P22 / ADIN2
P23 / ADIN3
P24 / ADIN4
P25 / ADIN5
P26 / ADIN6
P27 / ADIN7
VREFL
P30 / IRQ0
P31 / IRQ1
P32 / IRQ2
P33 / IRQ3
P34 / PWM0
P40
P41
P42
P43
P44
P45
P46
P47
P00 / SBO0
P01 / SBI0
P02 / SBT0
P03 / SBO1
P04 / SBI1
P05 / SBT1
P06 / PSBT0
P07 / RST
P10 / TCIO0
P11 / TCO1
P12 / TCI3
P13 / TCIO4
P14 / TCO35
P15 / RMOUT
P16 / PWM1
P17 / PWM2
SYNC
P80 / DGT15
P81 / DGT14
P82 / DGT13
P83 / DGT12
P84 / DGT11
P61 / SEG9
P60 / SEG8
P57 / SEG7
P56 / SEG6
P55 / SEG5
P54 / SEG4
P53 / SEG3
P52 / SEG2
P51 / SEG1
P50 / SEG0
P77 / DGT0
P76 / DGT1
P75 / DGT2
P74 / DGT3
P73 / DGT4
P72 / DGT5
P71 / DGT6
P70 / DGT7
P87 / DGT8
P86 / DGT9
P85 / DGT10

HD6433726A76H Terminal Function

Pin No.	Symbol	Port Name	I/O	INI	ACT	Function
1	KEY1	P21/ADIN1	I	–	H	Key scan input 1
2	KEY2	P20/ADIN0	I	–	H	Key scan input 0
3	VREFH	VREFH	I	VDD	VDD	Ref.V for analog input (High)
4	+5V	VDD	–	5V	5V	Power
5	4.32MHz	OSC2	O	–	–	µCOM system clock out
6	4.32MHz	OSC1	I	–	–	µCOM system clock in
7	GND	Vss	–	GND	GND	GND
8	X1	X1	I	–	–	µCOM system clock in
9	X0	X0	O	–	–	µCOM system clock out
10	CM	CM	I	GND	GND	Chip mode select input
11	—	P93/SBT2	O	H	L/H	Remote control signal in.
12	—	P92/SBI2	I	H	L	Pull up
13	—	P91/SBO2	O	H	L	NC
14	—	P90/BUZZER	O	H	L	NC
15	VPP	VPP	–	–	–	VPP
16	Seg 15	P67/Seg15	O	L	H	FL segment out 15
17	Seg 14	P66/Seg14	O	L	H	FL segment out 14
18	Seg 13	P65/Seg13	O	L	H	FL segment out 13
19	Seg 12	P64/Seg12	O	L	H	FL segment out 12
20	Seg 11	P63/Seg11	O	L	H	FL segment out 11
21	Seg 10	P62/Seg10	O	L	H	FL segment out 10
22	Seg 9	P61/Seg9	O	L	H	FL segment out 9
23	Seg 8	P60/Seg8	O	L	H	FL segment out 8
24	Seg 7	P57/Seg7	O	L	H	FL segment out 7
25	Seg 6	P56/Seg6	O	L	H	FL segment out 6
26	Seg 5	P55/Seg5	O	L	H	FL segment out 5
27	Seg 4	P54/Seg4	O	L	H	FL segment out 4
28	Seg 3	P53/Seg3	O	L	H	FL segment out 3
29	Seg 2	P52/Seg2	O	L	H	FL segment out 2
30	Seg 1	P51/Seg1	O	L	H	FL segment out 1

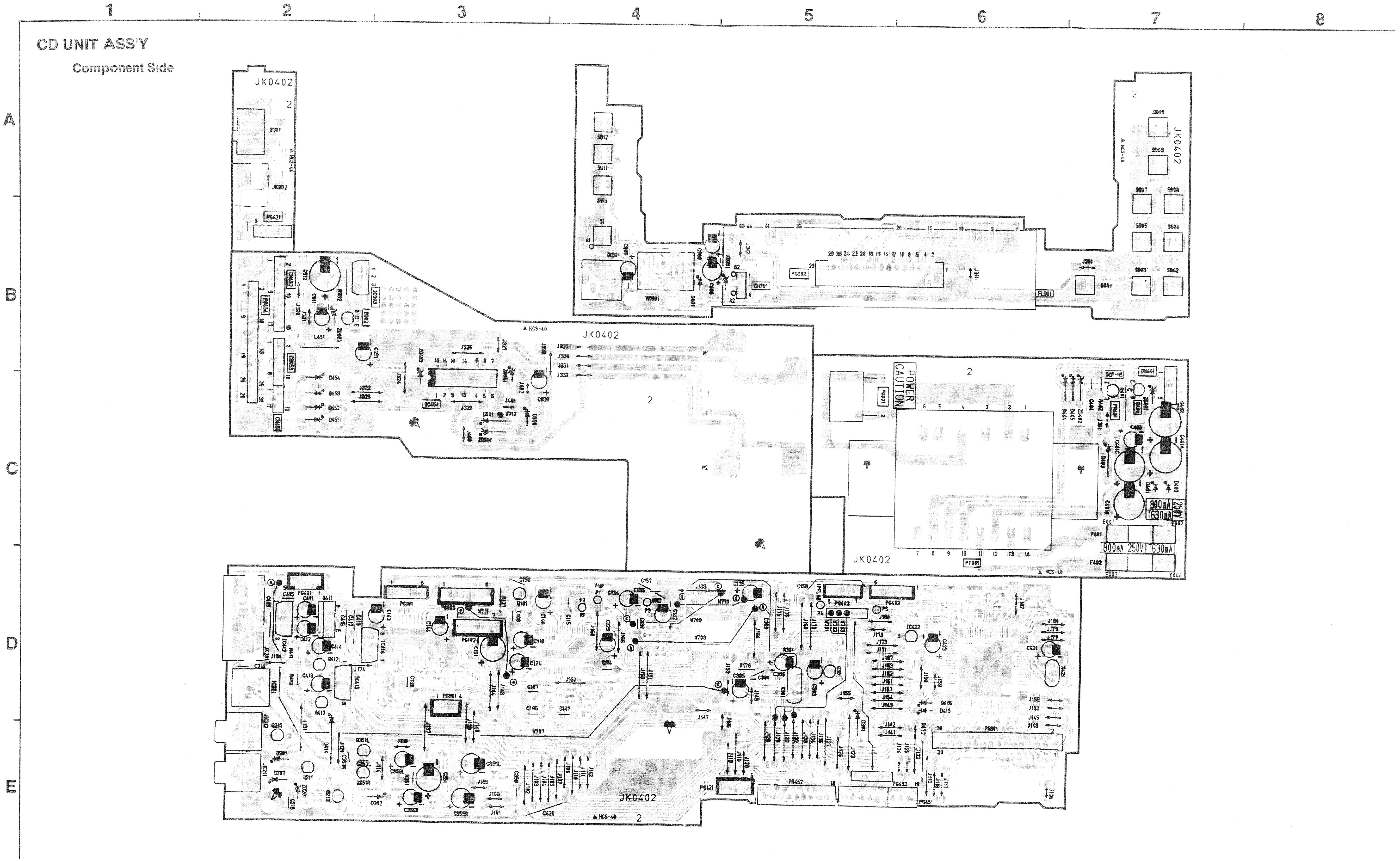
Pin No.	Symbol	Port Name	I/O	INI	ACT	Function
31	Seg 0	P50/Seg 0	O	L	H	FL segment out 0
32	DGT0/KSCAN7	P77/DGT 0	O	L	H	FL grid output 0, Key scan output 7
33	DGT1/KSCAN6	P76/DGT 1	O	L	H	FL grid output 1, Key scan output 6
34	DGT2/KSCAN5	P75/DGT 2	O	L	H	FL grid output 2, Key scan output 5
35	DGT3/KSCAN4	P74/DGT 3	O	L	H	FL grid output 3, Key scan output 4
36	DGT4/KSCAN3	P73/DGT 4	O	L	H	FL grid output 4, Key scan output 3
37	DGT5/KSCAN2	P72/DGT 5	–	L	H	FL grid output 5, Key scan output 2
38	DGT6/KSCAN1	P71/DGT 6	O	L	H	FL grid output 6, Key scan output 1
39	—	P70/DGT 7	O	L		NC
40	TRYM –	P87/DGT 8	O			CD changer mecha tray monitor output –
41	TRYM +	P86/DGT 9	O			CD changer mecha tray monitor output +
42	CAMM –	P85/DGT 10	O			CD changer mecha tray monitor output –
43	CAMM +	P84/DGT 11	O			CD changer mecha cam motor output +
44	CDPWR	P83/DGT 12	O		L	CD power control output
45	DRVMT	P82/DGT 13	O	H	L	Driver mute output
46	DMUTE	P81/DGT 14	O	L	H	CD DSP mute output
47	AMUTE	P80/DGT 15	O			Audio DSP mute output
48	SYNC	SYNC	O	–	–	NC
49	TLOCK	P17/PWM 2	O	L	L	CD DSP TLOCK signal input
50	FLOCK	P16/PWM 1	O	L	L	CD DSP FLOCK signal input
51	SENSE	P15/RMOUT	I	L	H	CD-DSP SENSE sianal input
52	MCLK	P12/TCO35	O	H	L/H	CD-DSP serial transmission clock output
53	STAT	P12/TCI04	O	–	H	CD-DSP serial transmission status input
54	MDATA	P12/TCI03	O	H	H	CD-DSP serial transmission data output
55	MLD	P11/TCO1	O	H	H	CD-DSP serial transmission load output
56	SRST	P10/TCIO0	O	L	H	Servo LSI reset output
57	RST	P07/RST	I	L	H	µCOM reset input
58	—	P06/PSBT0	O	L	H	Pull down
59	SQCK	P05/SBT1	O	H	L/H	Sub code (Q code) clock output
60	SUBQ	P04/SBI1	I	–	H	Sub code (Q code) data input
61	—	P03/SBO1	I	Hi-Z		NC
62	BUSCLK	P02/SBT0	I	–	L/H	DENON BUS transmission clock input
63	BUSIN	P01/SBI0	I	–		DENON BUS transmission data input
64	DATA	P00/SBO0	O			DENON BUS transmission data output
65	TRYSW4	P47	I	–		CD changer mecha tray SW input 4
66	TRYSW3	P46	I	–		CD changer mecha tray SW input 3
67	TRYSW2	P45	I	–		CD changer mecha tray SW input 2
68	TRYSW1	P44	I	–		CD changer mecha tray SW input 1
69	CAMSW4	P43	I	–		CD changer mecha cam SW input 4
70	CAMSW3	P42	I	–		CD changer mecha cam SW input 3
71	CAMSW2	P41	I	–		CD changer mecha cam SW input 2
72	CAMSW1	P40	I	–		CD changer mecha cam SW input 1
73	—	P34/PWM0	I	H	L	Pull up
74	PWRSW	P33/IRQ3	I			Power on input
75	—	P32/IRQ2	I	H	L	Pull up
76	—	P31/IRQ1	I	–	L/H	—
77	BUSINT	P30/IRQ0	I	–	L/H	DENON BUS communicate intervention input
78	VREFL	VREFL	I	GND	GND	Ref V for analog input (Low)
79	CD/VCD	P27/ADIN7	I	L	–	CD(L) and VCD switching input
80	LMTSW	P26/ADIN6	I	–	L	Pick-up inner circle position detect input
81	KEY5	P25/ADIN5	I	–	H	Key scan input 5
82	KEY4	P24/ADIN4	I	–	H	Key scan input 4
83	KEY3	P23/ADIN3	I	–	H	Key scan input 3
84	KEY2	P22/ADIN2	I	–	H	Key scan input 2

CD PLAYER SECTION

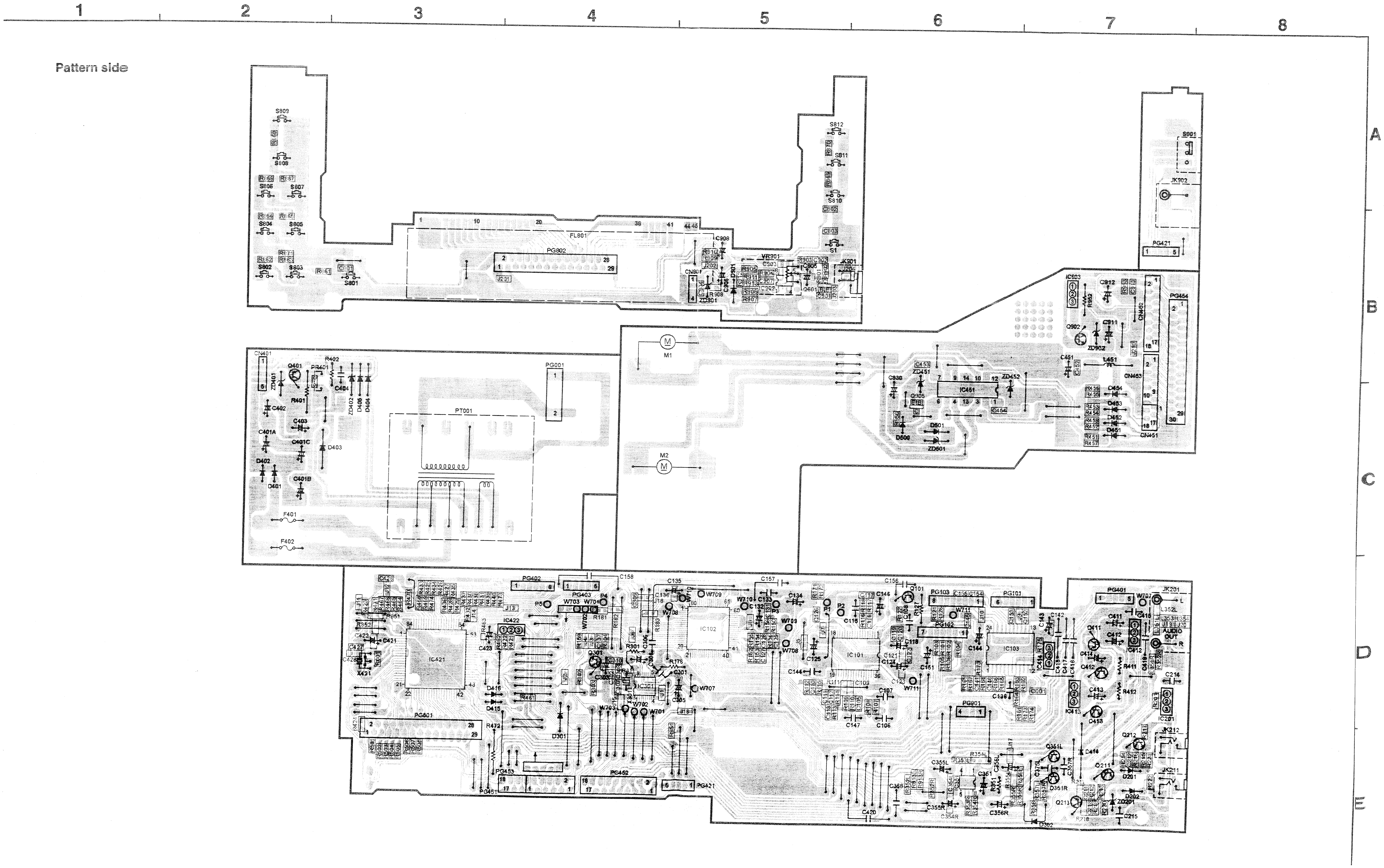
PRINTED WIRING BOARD

CD UNIT ASS'Y

Component Side


1
2
3
4
5
6
7
8
A
B
C
D
E
JK0402
2
HCS-40
POWER CAUTION
800mA 250V T630mA
PG801
PT801
F401
F402
IC422
PG601
PG451
PG452
PG453
V707
V708
V709

Pattern side


1
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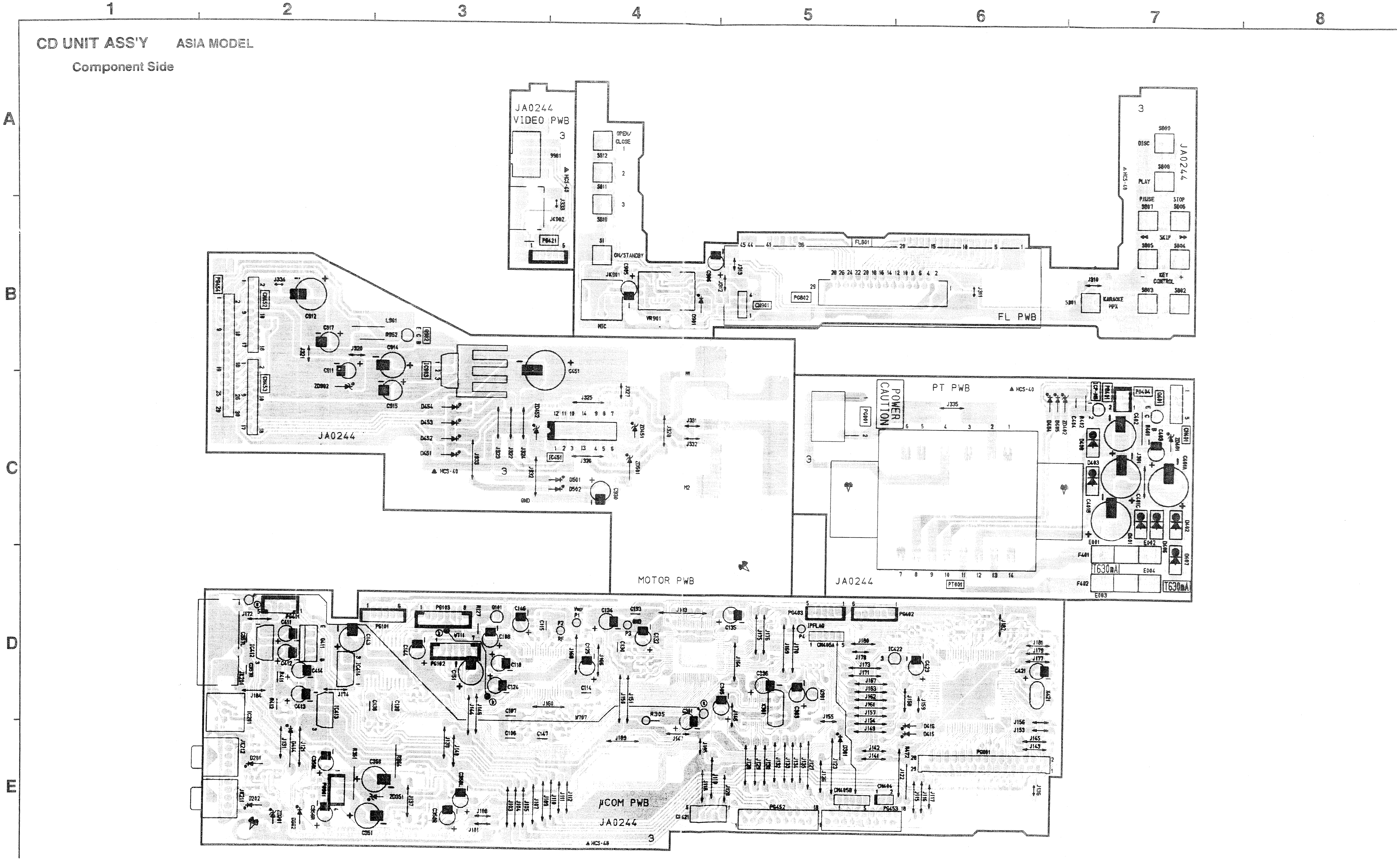
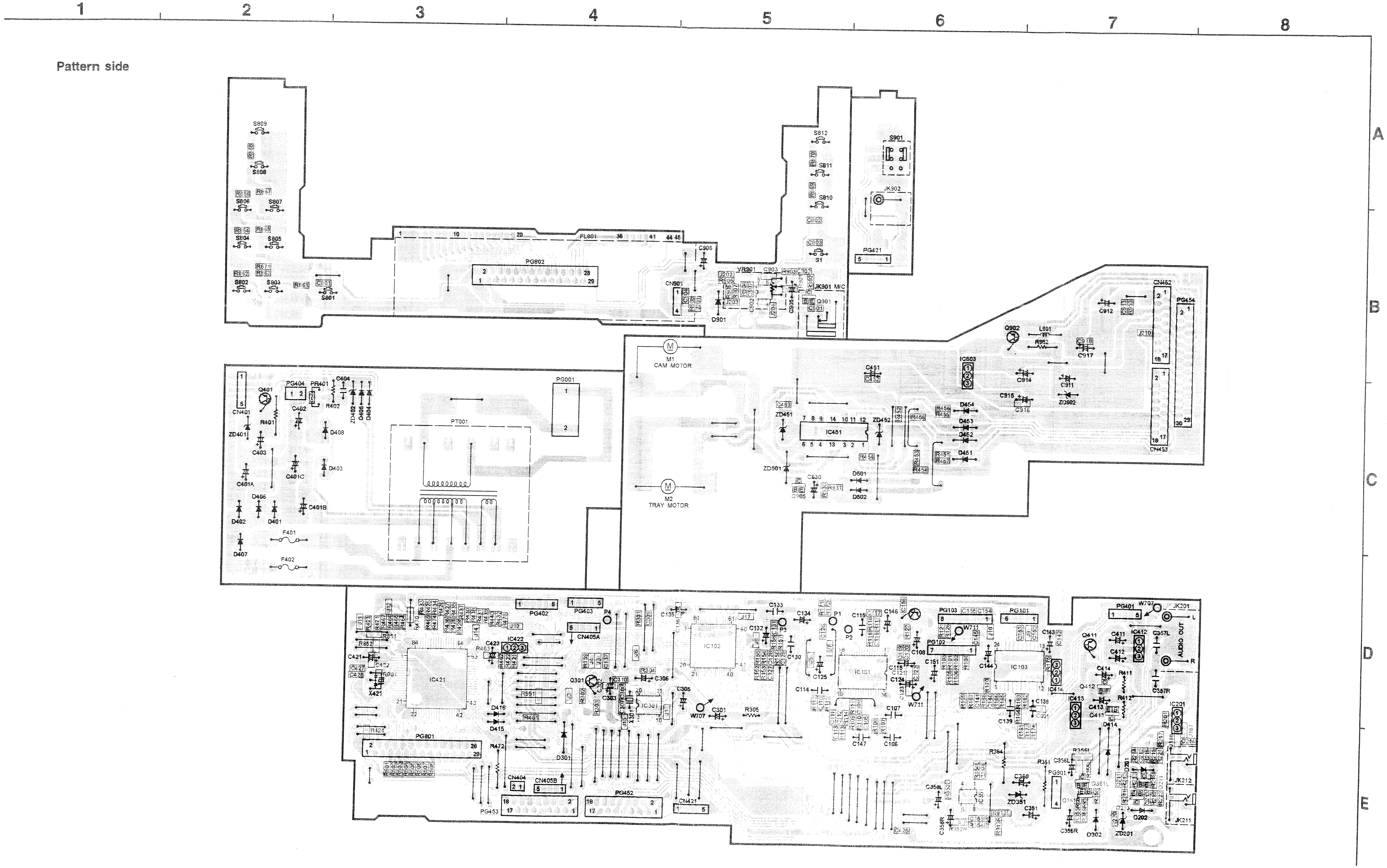
A
B
C
D
E
S809
S808
S806
S807
S804
S805
S802
S803
S801
FL801
PG802
J201
CN901
ZD901
D901
VR901
S812
S811
S810
S1
JK901
S901
JK902
PG421
IC903
Q902
ZD902
CN402
PG454
CN453
CN451
IC451
ZD451
ZD452
D501
ZD501
D500
Q905
L451
C451
M1
M2
CN401
Q401
R402
PR401
R401
ZD401
ZD402
D406
D404
C402
C403
C404
C401A
C401C
C401B
D403
D402
D401
F401
F402
PG001
PT001
PG402
PG403
IC422
IC421
X421
PG801
PG453
PG451
PG452
IC301
Q301
D301
D416
D415
R472
IC102
IC101
PG103
PG102
PG101
IC103
PG901
Q101
W709
W710
W708
W707
W711
W701
W702
W703
PG401
JK201
L
R
AUDIO OUT
Q411
Q412
Q413
IC412
IC413
IC201
R411
R412
JK212
JK211
Q212
Q211
Q213
D201
D202
ZD201
D414
Q351L
Q351R
D302
C420
C355L
C355R
C356R
C351
C158
C135
C157
C156
C214
C215

CD UNIT ASS'Y ASIA MODEL

Component Side


1
2
3
4
5
6
7
8
A
B
C
D
E
JA0244
VIDEO PWB
OPEN/CLOSE
ON/STANDBY
MIC
VR901
FL801
FL PWB
JA0244
DISC
PLAY
PAUSE
STOP
SKIP
KEY CONTROL
KARAOKE MPX
JA0244
MOTOR PWB
POWER CAUTION
PT PWB
JA0244
T630mA
T630mA
µCOM PWB
JA0244

Pattern side


1
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3
4
5
6
7
8
A
B
C
D
E
S809
S808
S807
S806
S805
S804
S803
S802
S801
FL801
PG902
CN901
D901
VR901
JK901 MIC
Q901
S812
S811
S810
S1
S901
JK902
PG421
CN452
PG454
CN453
Q902
L901
R952
C912
C917
C914
C911
C915
C916
ZD902
IC603
M1
CAM MOTOR
M2
TRAY MOTOR
IC451
ZD451
ZD452
ZD501
D451
D452
D453
D454
D501
D502
Q905
C630
C451
PG404
PR401
Q401
CN401
ZD401
R401
R402
C401A
C401B
C401C
C402
C403
C404
D401
D402
D403
D406
D407
D408
ZD402
ZD403
ZD404
F401
F402
PG001
PT001
PG402
PG403
P4
CN405A
CN405B
CN404
IC422
IC421
X421
R463
C423
D415
D416
D301
Q301
C303
C305
C306
IC301
X301
W707
C301
R305
PG801
PG453
PG452
CN421
R472
IC102
IC101
IC103
C133
C134
P1
P2
P3
C115
C146
C130
C132
C125
C114
C107
C106
C147
PG103
PG102
PG101
W711
C108
C118
C124
C151
C144
C143
IC414
IC413
IC412
C139
C138
R354
R351
C356L
R356L
PG901
ZD351
C350
C351
C356R
C358R
IC351
Q411
Q412
C411
C412
C413
C414
R411
R412
D414
PG401
W707
JK201
AUDIO OUT
L
R
C357L
C357R
IC201
D201
D202
ZD201
D302
JK212
JK211

CD PLAYER SECTION

NOTE FOR PARTS LIST

- Part indicated with the mark "⊙" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

Resistors

Ex.: RN 14K 2E 182 G FR

RN Type	14K Shape and performance	2E Power	182 Resistance	G Allowable error	FR Others
RD : Carbon RC : Composition RS : Metal oxide film RW : Winding RN : Metal film RK : Metal mixture		2B : 1/8W 2E : 1/4W 2H : 1/2W 3A : 1W 3D : 2W 3F : 3W 3H : 5W		F : ±1% G : ±2% J : ±5% K : ±10% M : ±20%	P : Pulse-resistant type NL : Low noise type NB : Non-burning type FR : Fuse-resistor F : Lead wire forming

* Resistance

1 8 2 ⇒ 1800 ohm = 1.8 kohm
2 — Indicates number of zeros after effective number.
1 8 — 2-digit effective number.
- Units: ohm

1 R 2 ⇒ 1.2 ohm
2 — 1-digit effective number.
1 R — 2-digit effective number, decimal point indicated by R.
- Units: ohm

Capacitors

Ex.: CE 04W 1H 2R2 M BP

CE Type	04W Shape and performance	1H Dielectric strength	2R2 Capacity	M Allowable error	BP Others
CE : Aluminum foil electrolytic CA : Aluminum solid electrolytic CS : Tantalum electrolytic CQ : Film CK : Ceramic CC : Ceramic CP : Oil CM : Mica CF : Metallized CH : Metallized		0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1V : 35V 1H : 50V 2A : 100V 2B : 125V 2C : 160V 2D : 200V 2E : 250V 2H : 500V 2J : 630V		F : ±1% G : ±2% J : ±5% K : ±10% M : ±20% Z : +80% −20% P : +100% −0% C : ±0.25pF D : ±0.5pF = : Others	HS : High stability type BP : Non-polar type HR : Ripple-resistant type DL : For change and discharge HF : For assuring high frequency U : UL part C : CSA part W : UL-CSA type F : Lead wire forming

* Capacity (electrolyte only)

2 2 2 ⇒ 2200μF
2 — Indicates number of zeros after effective number.
2 2 — 2-digit effective number.
- Units: μF.

2 R 2 ⇒ 2.2μF
2 — 1-digit effective number.
2 R — 2-digit effective number, decimal point indicated by R.
- Units: μF.

* Capacity (except electrolyte)

2 2 2 ⇒ 2200pF=0.0022μF
2 — (More than 2) — Indicates number of zeros after effective number.
2 2 — 2-digit effective number.
- Units: μF.

2 2 1 ⇒ 220pF
1 — (0 or 1) — Indicates number of zeros after effective number.
2 2 — 2-digit effective number.
- Units: pF.

- When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

PARTS LIST OF P.W.B. UNIT ASS'Y

CD CHANGER PLAYER UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC101	9LC K077 21	IC 8808SB	
IC102	9LC K077 31	IC MN662720RB	
IC103	262 2143 000	IC AN8389S	
IC201	269 0098 006	GP1F32T (OPTICAL OUT)	
IC301	9LC K045 22R	IC PCM1717E	
IC351	263 0934 900	IC BA4510F	
IC412,413	9LC P024 11	IC KIA7805PI	
IC414	9LC P024 12	IC KIA7806PI	
IC421	9LC K077 41	IC MN1874823P7B	
IC422	9LC P007 12R	IC KIA7045P	
IC451	9LC P025 41	IC LB1648	
IC901	9LC W002 11	IC RD-DVK023K	Asia model only
IC902	263 0934 900	IC BA4510F	Asia model only
IC903	9LC P024 11	IC KIA7805PI	Asia model only
⚠ PR401	LA2 500U 216	IC protector ICP-N5	
Q101	271 0183 914	Transistor 2SA933 (S)	
Q211	9LC A006 61R	Transistor KTA1267(GR)	
Q212	273 0303 910	Transistor 2SC1740S (S)	
Q213	9LC A006 61R	Transistor KTA1267(GR)	
Q301	9LC A006 41R	Transistor KTC3199L(GR)	
Q351L,351R	274 0131 004	Transistor 2SD1468S	
Q401	9L2 3286 25	Transistor 2SB647C	
Q411	9L2 3243 62	Transistor 2SA1129K	
Q412	9L2 3280 83T	Transistor 2SA844E	
Q413	269 0062 906	Transistor DTC124ES	
Q901	273 0384 900	Transistor 2SC2412KT	Asia model only
Q902	274 0036 002	Transistor HIT5609C	Asia model only
D201,202	276 0401 905	Diode IN4531/ISS133	
D301,302	276 0401 905	Diode IN4531/ISS133	
D401~403	916 0053 008	Diode IN4002	
D404,405	276 0401 905	Diode IN4531/ISS133	
D414~416	276 0401 905	Diode IN4531/ISS133	
D417	916 0053 008	Diode IN4002	
D451~454	276 0401 905	Diode IN4531/ISS133	
D901	276 0401 905	Diode IN4531/ISS133	Asia model only
ZD201	276 0637 902	Zener diode MTZJ-6.2A	6.2V
ZD401	276 0645 949	Zener diode MTZJ-27A	27V
ZD402	276 0643 996	Zener diode MTZJ-5.6A	5.6V
ZD451	960 0013 401	Zener diode MTZJ-3.9B	3.9V
ZD452	276 0637 902	Zener diode MTZJ-6.2A	6.2V
ZD901	276 0643 925	Zener diode MTZJ-2.7A	2.7V Asia model only
ZD902	9L2 3480 72M	Zener diode MTZJ-3.9B	3.9V Asia model only
FL801	9LD D000 71	FL Tube (6-ST-59GK)	
RESISTORS GROUP			
R101,102		Carbon chip 22kohm	
R103,104		Carbon chip 47kohm	
R105,106		Carbon chip 22kohm	
R107		Carbon chip 390kohm	
R108		Carbon chip 330kohm	
R109		Carbon chip 3.3kohm	
R110		Carbon chip 18kohm	
R111		Carbon chip 22kohm	
R112		Carbon chip 3.3kohm	
R114		Carbon chip 22kohm	
R115		Carbon chip 220kohm	
R116		Carbon chip 1.8kohm	
R117		Carbon chip 1.5kohm	
R118		Carbon chip 3.3kohm	
R121		Carbon chip 10kohm	
R122		Carbon Chip 100ohm	
R126		Carbon Chip 47ohm	
R127	241 2394 043	Carbon film 18ohm I/4W	RD14B2E180J
R152		Carbon chip 68kohm	
R153		Carbon chip 120kohm	
R154		Carbon chip 1Mohm	
R155		Carbon chip 100kohm	
R157		Carbon Chip 150ohm	
R158		Carbon Chip 680ohm	
R159		Carbon chip 1kohm	
R161		Carbon chip 22kohm	
R162		Carbon chip 47kohm	
R163		Carbon chip 1.8kohm	
R164		Carbon chip 2.7kohm	
R165		Carbon chip 220kohm	
R166		Carbon chip 1.8kohm	
R167		Carbon chip 68kohm	
R168		Carbon chip 1kohm	
R169		Carbon chip 33kohm	
R170		Carbon chip 330kohm	
R171		Carbon chip 22kohm	
R172		Carbon chip 1kohm	
R173		Carbon chip 150kohm	

Ref. No.	Part No.	Part Name	Remarks
R174		Carbon chip 12kohm	
R175		Carbon Chip 100ohm	
R201		Carbon Chip 470ohm	
R211		Carbon chip 10kohm	
R212,213		Carbon chip 22kohm	
R214		Carbon chip 10kohm	
R215		Carbon chip 47kohm	
R216		Carbon chip 10kohm	
R217~219		Carbon chip 22kohm	
R220		Carbon chip 10kohm	
R221		Carbon Chip 220ohm	
R222		Carbon Chip 100ohm	
R301		Carbon Chip 560ohm	
R302,303		Carbon chip 10kohm	
R304	241 2400 995	Carbon film 10Kohm l/6W	RD14B2E103J (5)
R351	241 0145 003	Carbon film 22ohm l/2W	RD14B2H220J
R352L,352R		Carbon Chip 680ohm	
R353L,353R		Carbon chip 10kohm	
R354L,354R		Carbon chip 2.2kohm	
R355L,355R		Carbon chip 68kohm	
R356L,356R		Carbon Chip 680ohm	
R357L,357R		Carbon chip 1kohm	
R358		Carbon chip 1kohm	
R401	241 2399 970	Carbon film 3.3kohm 1/6W	RD14B2E332J (5)
R402	241 2400 995	Carbon film 10Kohm l/6W	RD14B2E103J (5)
R411	241 2401 978	Carbon film 22Kohm l/6W	RD14B2E223J (5)
R412	241 2399 938	Carbon film 2.2Kohm l/6W	RD14B2E222J (5)
R421		Carbon chip 47kohm	
R422		Carbon chip 1kohm	
R423		Carbon chip 10kohm	
R424~432		Carbon chip 1kohm	
R433~440		Carbon chip 22kohm	
R451~458		Carbon chip 10kohm	
R461~467		Carbon chip 10kohm	
R469		Carbon chip 10kohm	
R470		Carbon chip 10kohm	Asia model only
R471		Carbon chip 10kohm	Except Asia model
R472	241 2400 995	Carbon film 10Kohm l/6W	RD14B2E103J (5) Except Asia model
R473,474		Carbon chip 10kohm	Except Asia model
R851,852		Carbon chip 15kohm	
R861		Carbon chip 1.5kohm	
R862		Carbon chip 2.2kohm	
R863		Carbon chip 2.7kohm	
R864		Carbon chip 5.6kohm	
R865		Carbon chip 8.2kohm	
R866		Carbon chip 15kohm	
R867		Carbon chip 33kohm	

Ref. No.	Part No.	Part Name	Remarks
R868		Carbon chip 82kohm	
R869		Carbon chip 1.5kohm	
R870		Carbon chip 2.2kohm	
R871		Carbon chip 3.9kohm	
R901		Carbon Chip 470ohm	Asia model only
R902		Carbon chip 47kohm	Asia model only
R903		Carbon Chip 470ohm	Asia model only
R904		Carbon chip 100kohm	Asia model only
R905		Carbon chip 1kohm	Asia model only
R906,907		Carbon chip 10kohm	Asia model only
R908		Carbon chip 100kohm	Asia model only
R909,910		Carbon chip 15kohm	Asia model only
R911,912		Carbon chip 100kohm	Asia model only
R913L,913R		Carbon chip 1kohm	Asia model only
R951		Carbon chip 10kohm	Asia model only
R952		Carbon film 330ohm l/6W	Asia model only
R953		Carbon chip 10kohm	Asia model only
VR901	9L0 1581 09	Variable resistor 10kohm	Asia model only
CAPACITORS GROUP			
C105		Chip capacitor 330pF	
C106,107	255 1084 007	Mylar film 0.1µF/50V	CQ93M1H104K
C108	254 4260 977	Electrolytic 4.7µF/50V	CE04W1H4R7M
C109		Chip capacitor 680pF/50V	
C110		Chip capacitor 2200pF/50V	
C111		Chip capacitor 0.1µF	
C112		Chip capacitor 4700pF	
C114,115	255 1084 007	Mylar film 0.1µF/50V	CQ93M1H104K
C116		Chip capacitor 4pF	
C117		Chip capacitor 12pF	
C118	254 4260 045	Electrolytic 1µF/50V	CE04W1H010M
C119		Chip capacitor 100pF/50V	
C120		Chip capacitor 0.022µF	
C121		Chip capacitor 4700pF	
C122		Chip capacitor 2200pF/50V	
C123		Chip capacitor 0.1µF	
C124	254 4252 040	Electrolytic 220µF/10V (SME)	CE04W1A220M
C125	254 4260 045	Electrolytic 1µF/50V (SSL)	CE04W1H010M
C126		Chip capacitor 560pF	
C127,128		Chip capacitor 0.022µF	
C130	255 1084 007	Mylar film 0.1µF/50V (AMZ)	CQ93M1H104K
C132	254 4196 928	Electrolytic 0.33µF/50V (SRA)	E04W1HR33M(SRA)
C133	255 1084 007	Mylar film 0.1µF/50V	CQ93M1H104K
C134,135	254 4252 037	Electrolytic 100µF/10V	CE04W1A101M
C136		Chip capacitor 0.1µF	
C137		Chip capacitor 100pF/50V	
C139	255 1086 005	Mylar film 0.15µF/50V	CQ93M1H154K
C140		Chip capacitor 4700pF	
C141		Chip capacitor 0.015µF	

CD PLAYER SECTION

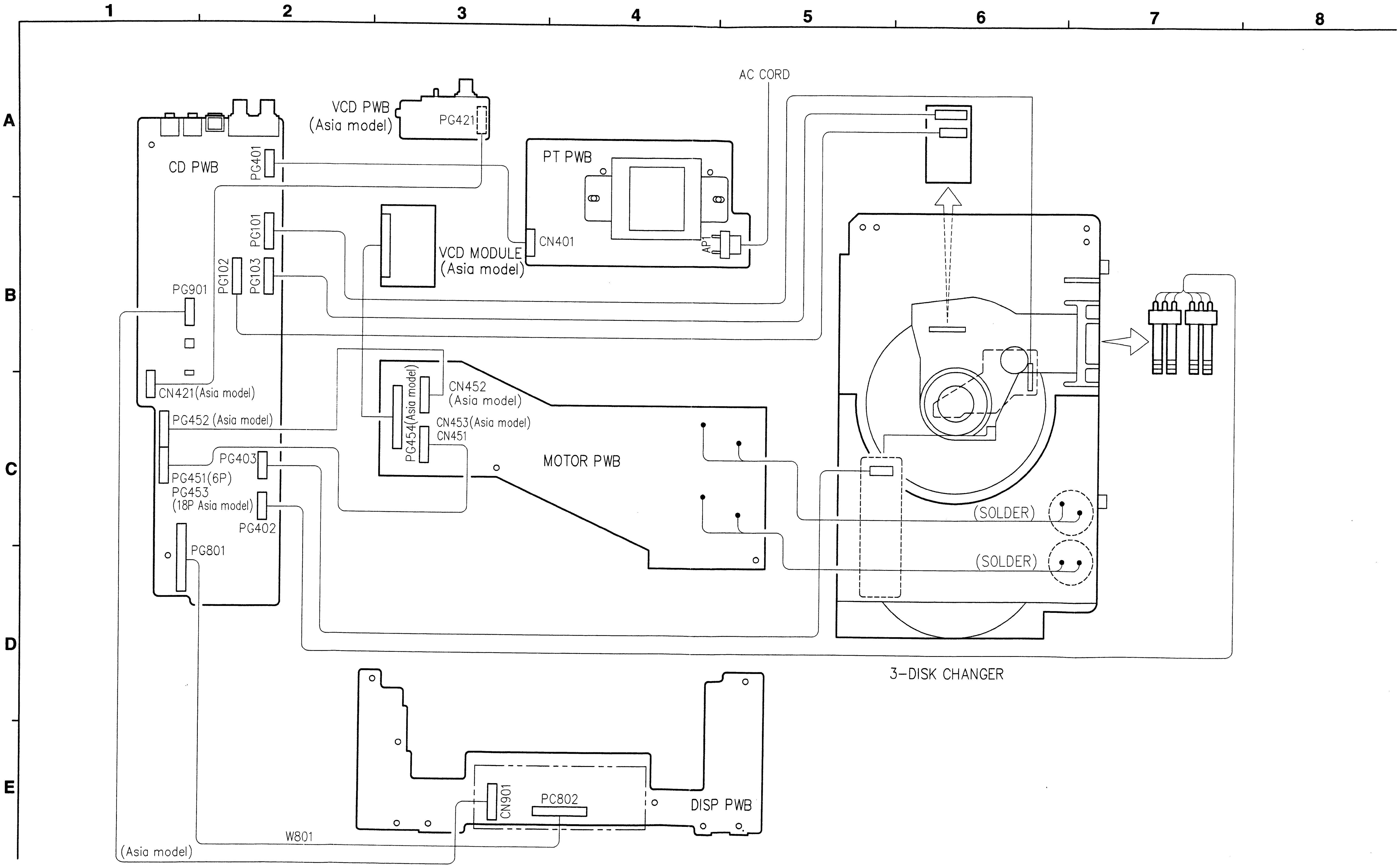
Ref. No.	Part No.	Part Name	Remarks
C142		Chip capacitor 0.01µF	
C143,144	254 4252 037	Electrolytic 100µF/10V	CE04W1A101M
C145		Chip capacitor 0.01µF	
C146	254 4260 058	Electrolytic 2.2µF/50V	CE04W1H2R2M
C147	255 1264 940	Mylar film 2200pF/50V	CQ93M1H222J(B)
C151	254 4252 053	Electrolytic 330µF/10V	CE04W1A331M
C152~155		Chip capacitor 0.1µF	
C211~213		Chip capacitor 1000pF/50V	
C214	HMA 1000 165	Axial capacitor 0.01µF/16V	CK14F1C103=
C301	254 4252 040	Electrolytic 220µF/10V	CE04W1A221M
C302		Chip capacitor 0.01µF	
C303	254 4410 921	Electrolytic 10µF/50V	CE04W1H100M
C305,306	254 4410 921	Electrolytic 10µF/50V	CE04W1H100M
C307,308		Chip capacitor 22pF/50V	
C309		Chip capacitor 1000pF/50V	
C310	253 1195 945	Axial capacitor 3300pF/16V (X)	CK14X1C332M
C351	254 4256 059	Electrolytic 220µF/25V (SSL)	CE04W1E221M
C354L,354R		Chip capacitor 5600pF/50V	
C355L,355R	254 4252 040	Electrolytic 220µF/10V	CE04W1A221M
C356L,356R	254 4252 008	Electrolytic 22µF/50V	CE04W1H220M
C357L,357R	255 1264 982	Mylar film 4700pF/50V	CQ93M1H472J(B)
C401A,401B	254 4254 792	Electrolytic 2200µF/16V	CE04W1C222M
C401C	254 4254 789	Electrolytic 1000µF/16V	CE04W1C102M
C402	254 4261 031	Electrolytic 220µF/50V	CE04W1H221M
C403	254 4261 015	Electrolytic 47µF/50V	CE04W1H470M
C404	253 1146 907	Ceramic 0.01 µF/50V	CK45F1H103Z
C411~414	254 4260 087	Electrolytic 10µF/50V	CE04W1H100M
C415~419	HMA 1000 165	Axial capacitor 0.01µF/16V	CK14F1C103=
C421	254 4252 037	Electrolytic 100µF/10V	CE04W1A101M
C422		Chip capacitor 0.01µF	
C423	254 4260 977	Electrolytic 4.7µF/50V (SSL)	CE04W1H4R7M
C451	254 4252 037	Electrolytic 100µF/10V (SME)	CE04W1A101M
C452~454		Chip capacitor 0.01µF	
C801,802		Chip capacitor 560pF	
C901		Chip capacitor 0.01µF	Asia model only
C902	254 4196 009	Electrolytic 0.1µF/50V (SRA)	CE04W1H0R1M(SRA) Asia model only
C903		Chip capacitor 330pF	Asia model only
C904		Chip capacitor 4700pF	Asia model only
C905	254 4196 054	Electrolytic 2.2µF/50V (SRA)	CE04W1H2R2M(SRA) Asia model only
C906	254 4193 031	Electrolytic 47µF/16V (SRA)	CE04W1C470M(SRA) Asia model only
C907		Chip capacitor 56pF/50V	Asia model only
C908	254 4193 002	Electrolytic 10µF/16V (SRA)	CE04W1C100M(SRA) Asia model only
C911		Electrolytic 47µF/25V (SSL)	Asia model only

Ref. No.	Part No.	Part Name	Remarks
C912		Electrolytic 470µF/6.3V (SME)	Asia model only
C913		Chip capacitor 1000pF/50V	Asia model only
C914		Electrolytic 220µF/25V (SSL)	Asia model only
C915	254 4252 040	Electrolytic 220µF/10V	CE04W1A220M Asia model only
C916		Chip capacitor 0.1µF	Asia model only
C917	254 4252 040	Electrolytic 220µF/10V	CE04W1A220M Asia model only
C918		Chip capacitor 0.1µF	Asia model only

OTHER PARTS GROUP				Q'ty
LA451	9L2 1222 39M	LA axial coil 100K		1
L901	9L2 2279 14M	Axial coil 3.3	Asia model only	1
X301	399 0036 013	Crystal 16.9MHz		1
X421	399 0160 002	Crystal CST 8.0 MTW		1
J001~016		Carbon Chip 0ohm		6
J177		Jumper pin L=10mm		1
J201~204		Carbon Chip 0ohm		4
J210		Carbon Chip 0ohm		1
S001	212 5604 910	Tact switch		1
S801~803	212 5604 910	Tact switch	Asia model only	3
S804~812	212 5604 910	Tact switch		9
S901	9L2 6225 21	Switch SW-SL2-2	Asia model only	1
JK201	9LE R004 01	2P US pin jack		1
JK211,212	9L2 6714 13	Mini jack (3.5)		2
JK901	9L2 6950 33	Headphone jack	Asia model only	1
JK902	9LE R002 41	1P US pin jack	Asia model only	1
CN401		5P PH boardin		1
CN421		5P connector	Asia model only	1
CN451		6P BTEM connector	Except Asia model	1
CN452,453		18P BTEM connector	Asia model only	2
CN901		4P TXL connector	Asia model only	1
E001~004	9L2 7292 52R	Fuse holder		4
E201		Lug terminal		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
E801	9LN J023 21	FL Holder		1
E804		Shield plate C	Asia model only	1
PG001		2P PLG-VH plug		1
PG101	9L2 6742 65	6P MX pin post		1
PG102	9L2 9590 56	7P PH pin post		1
PG103	9L2 9590 57	8P PH pin post		1
PG401		5P PH plug		1
PG402	9L2 6742 65	6P MX pin post		1
PG403	9L2 6742 64	5P MX pin post		1
PG421		5P TXL pin post	Asia model only	1
PG451		6P BTEM pin post	Except Asia model	1
PG452,453		18P BTEM pin post	Asia model only	2
PG454		30P BTEM pin post	Asia model only	1
PG801,802	9L2 6989 93	29P FFC connector (L)		2
PG901		4P TXL plug	Asia model only	1
P001~004		1 SQ pin		4
W701		UL wire L=60 PINK		1
W702		UL wire L=60 BLK		1
W703		UL wire L=50 BRN		1
W704		UL wire L=30 BLK		1
W705		UL wire L=25 BLK		1
W706		UL wire L=40 BLK		1
W707		UL wire L=180 BLK		1
#001		Shield plate (A)	Asia model only	1
#002		Shield plate B	Asia model only	1
	9LJ T070 41	CDC P.W.B. unit Ass'y	U.S.A./Canada models	1
	9LJ T070 42	CDC P.W.B. unit Ass'y	Europe model only	1
	9LJ T070 43	CDC P.W.B. unit Ass'y	U.K. model only	1
	9LJ T070 46	CDC P.W.B. unit Ass'y	Asia model only	1

WIRING DIAGRAM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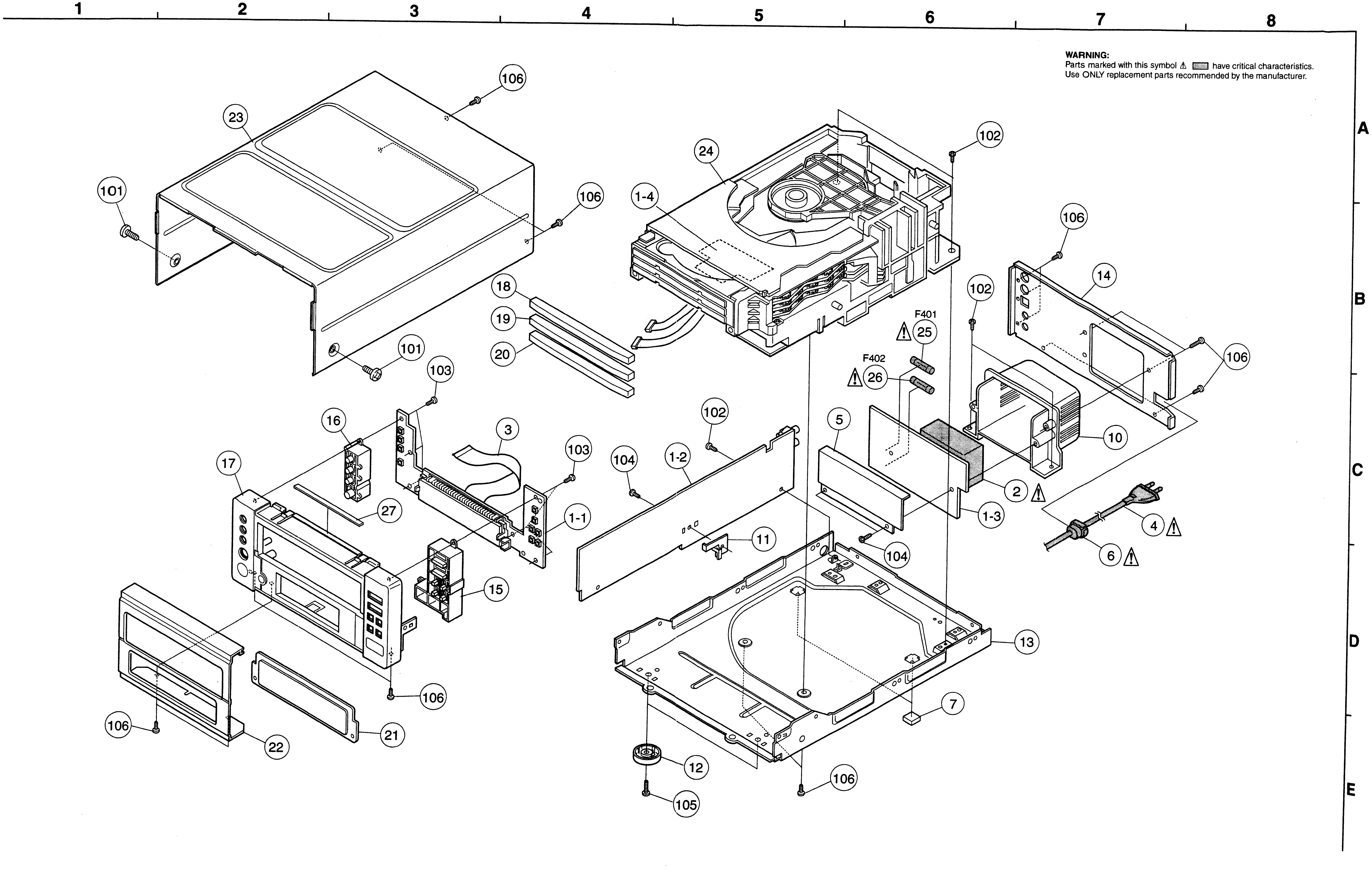
A
B
C
D
E
AC CORD
VCD PWB
(Asia model)
PG421
CD PWB
PG401
PT PWB
PG101
CN401
AP1
VCD MODULE
(Asia model)
PG102
PG103
PG901
CN421(Asia model)
CN452
(Asia model)
PG452 (Asia model)
PG454(Asia model)
CN453(Asia model)
CN451
MOTOR PWB
PG403
PG451(6P)
PG453
(18P Asia model)
PG402
PG801
(SOLDER)
(SOLDER)
3-DISK CHANGER
CN901
PC802
DISP PWB
W801
(Asia model)

EXPLODED VIEW



WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

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101
103
102
F401
⚠25
F402
⚠26
106
16
3
103
102
5
10
17
104
1-2
2 ⚠
27
1-1
1-3
4 ⚠
11
104
6 ⚠
15
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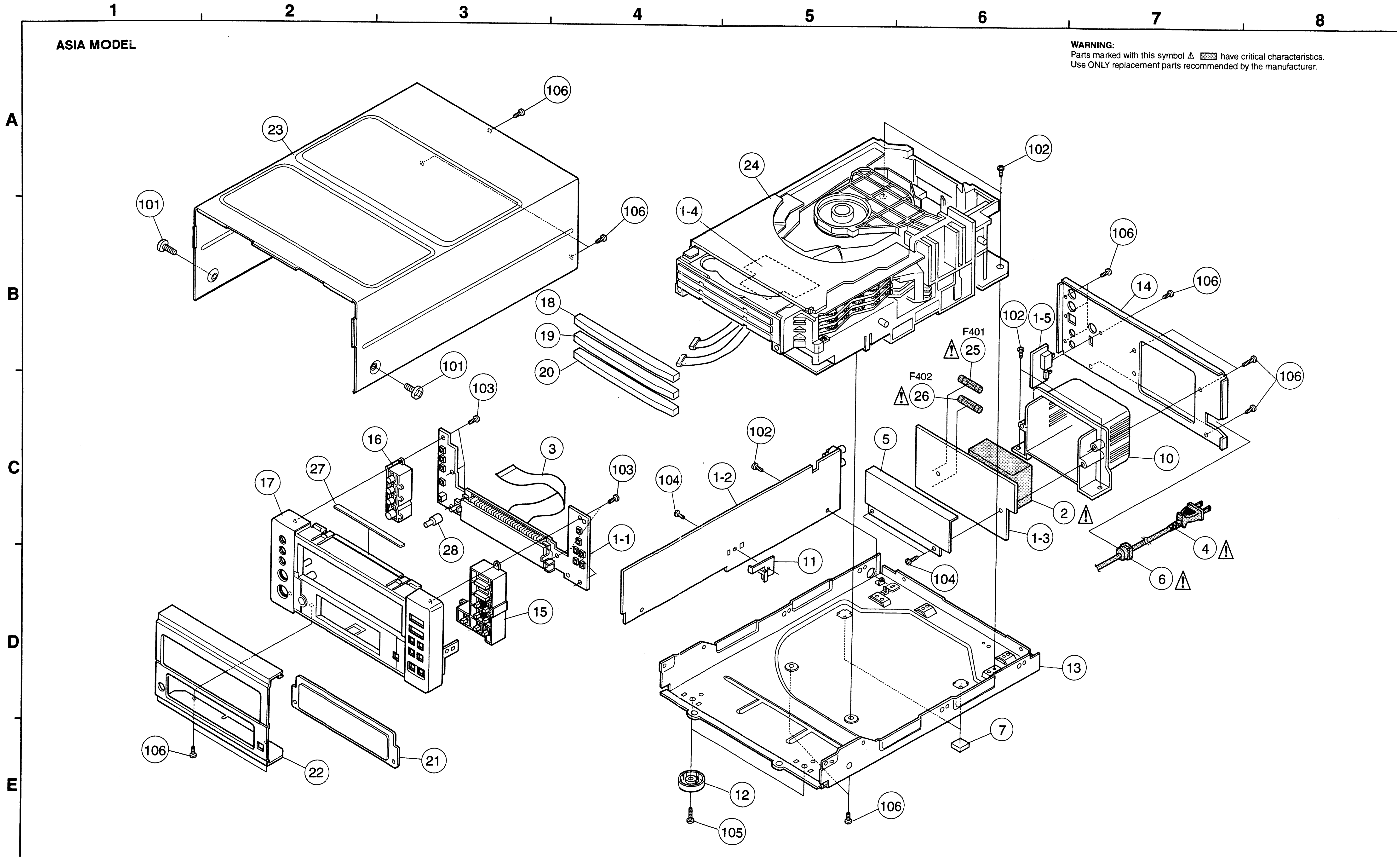
105

ASIA MODEL

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.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106
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102
1-5
19
F401
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101
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106
103
F402
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102
5
16
3
10
103
27
104
1-2
17
2
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105

PARTS LIST EXPLODED VIEW

CD CHANGER PLAYER SECTION (UDCM-M7)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	Note	CDC P.W.B. unit Ass'y		1
1-1		Display unit		(1)
1-2		CD unit		(1)
1-3		P.T unit		(1)
1-4		Motor unit		(1)
1-5		VCD unit	Asia model only	(1)
⚠ 2	Note	Power trans.		1
3	9LE K002 37	29P FFC cable	W801	1
⚠ 4	Note	AC cord		1
5		Shield sheet		1
⚠ 6	Note	AC cord bushing		1
7	9LM Q000 35	Leg		2
★ 8	9LM S002 11	Felt		2
★ 9	9LN A218 01	P.W.B bracket		1
10	9LN J023 11	PT Cover		1
11	9LN J023 31	P.W.B holder		1
12	9LN M007 31	Foot (30)		2
13	9LN Q046 01	Bottom chassis (CD)		1
14	Note	Rear plate		1
15	Note	Button (CD)		1
16	9LP C021 61	Button (P)		1
17	Note	Front panel		1
18	9LP H045 01	CD tray panel (1)		1
19	9LP H045 02	CD tray panel (2)		1
20	9LP H045 03	CD tray panel (3)		1
21	9LP H045 71	Clear panel		1
22	Note	Front metal (CD)		1
23	9LQ A009 13	Top cover		1
24	9LU C004 51	3-CD changer mecha Ass'y		1
⚠ 25	Note	Fuse	F401	1
⚠ 26	Note	Fuse	F402	1
27		Himeron sheet		1
28	9LP C021 71	Mic knob	Asia model only	1
★ 29		Manufactured label	U.S.A./Canada models	1
★ 30		Class label	Asia model only	1
★ 31		Wire clamper	Europe model only	1
★ 32		Origin label	Asia model only	1
★ 33		Fuse caution label	U.S.A./Canada models	1
★ 34		Caution label	U.S.A./Canada models	1
SCREWS & NUTS				
101		Screw 4x4 DT BIND B		2
102	9L8 6914 08	Screw BH BT 3x8	Europe model only	1
102	9L8 6914 08	Screw BH BT 3x8		8
103	9L8 6914 10	Screw BH BT 3x10		7
104	9L8 6914 14	Screw BT 3x14		3
105	9L8 6994 08	Screw BH BT 3x8 BBC		2
106	9L8 6994 10	Screw BH BT 3x10 BBC		14
106	9L8 6994 10	Screw BH BT 3x10 BBC	Asia model only	1

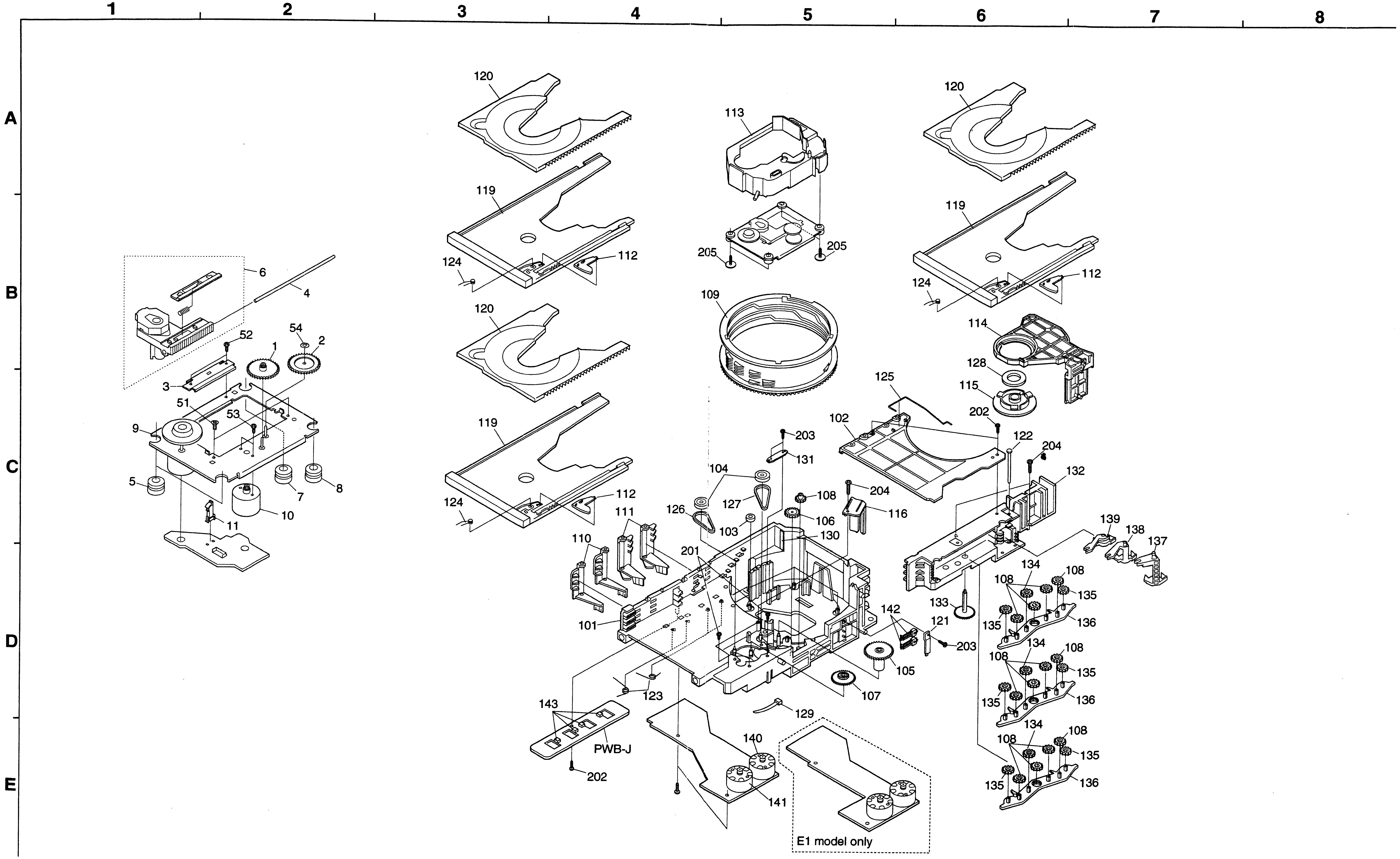
ADDENDUM PARTS LIST

PARTS LIST OF EXPLODED VIEW

Ref. No.	Part Name	Part No.	Part No.	Part No.	Part No.
		U.S.A/Canada	Europe	U.K.	Asia
1	CDC P.W.B. unit Ass'y	9LJ T070 41	9LJ T070 42	9LJ T070 43	9LJ T070 46
⚠ 2	Power trans.	9LB T009 02	9LB T009 03	9LB T009 03	9LB T009 61
⚠ 4	AC cord	9LE V004 42	9LE V004 43	9LE V004 43	9LE V004 43
⚠ 6	AC cord bushing	9L3 8722 71	9LM L000 61	9LM L000 61	9LM L000 61
14	Rear plate	9LN Q046 11	9LN Q046 12	9LN Q046 12	9LN Q046 13
15	Button (CD)	9LP C021 51	9LP C021 51	9LP C021 51	9LP C021 52
17	Front panel	9LP H044 91	9LP H044 91	9LP H044 91	9LP H044 92
22	Front metal (CD)	9LP M048 01	9LP M048 01	9LP M048 01	9LP M048 02
⚠ 25	Fuse T800mA 250V (F401)	9L2 7224 69	—	—	—
⚠ 25	Fuse T630mA (F401)	—	9L2 7280 72	9L2 7280 72	9L2 7280 72
⚠ 26	Fuse T800mA 250V (F402)	9L2 7224 69	—	—	—
⚠ 26	Fuse T630mA (F402)	—	9L2 7280 72	9L2 7280 72	9L2 7280 72

CD PLAYER SECTION

EXPLODED VIEW OF CD MECHANISM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108
135
107
123
136
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129
143
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PWB-J
140
135
202
135
136
141
E1 model only

PARTS LIST OF CD CHANGER MECHANIS M UNIT

Ref. No.	Part No.	Part Name	Remarks	Q'ty
LOADER MECH. SECTION				
101		Main base	LCHSM0037AWZZ	1
102		Top board	LANGF0024AWZZ	1
103		Cam guide roller	NROLP0007AWZZ	3
104		Drive pulley	NPLYR0004AWZZ	2
105		Idler gear	NGERH0052AWZZ	1
106		Cam gear	NGERH0053AWZZ	1
107		Middle gear	NGERH0054AWZZ	1
108		Tray idler gear	NGERH0057AWZZ	12
109		Main cam	MCAMP0127AFZZ	1
110		Front switch lever	MLEVP0056AWZZ	2
111		Rear switch lever Ass'y	MLEVP0057AWM1	2
112		Tray lock lever	MLEVP0058AWZZ	3
113		Mecha holder	PGIDM0018AWZZ	1
114		Stabilizer holder	PGIDM0019AWZZ	1
115		Stabilizer	LHLDM1008AWZZ	1
116		Mecha holder guide	PGIDM0017AWZZ	1
119		Guide tray	GCOVA1126AWZZ	3
120		Disk tray	GCOVA1127AWZZ	3
121		Switch angle	LANGF0025AWZZ	1
122		Tray change shaft	NSFTL0001AWZZ	1
123		Tray switch spring	MSPRD0078AWFJ	4
124		Tray lock lever spring	MSPRD0080AWFJ	3
125		Disk stop spring	MSPRD0079AWFJ	1
126		Tray drive belt	NBLT0028AWZZ	1
127		Cam drive belt	NBLT0027AWZZ	1
128		Magnet	PMAGF0001AWZZ	1
129		Nylon band (L=80mm)	92LN-BAND1318A	2
130		Rubber sheet	PGUMS0012AWZZ	1
131		Mecha holder angle	LANGF0028AWZZ	1
132		Change box	LCHSM0038AWZZ	1
133		Center gear	NGERH0055AWZZ	1
134		Center tray gear	NGERH0056AWZZ	3
135		Tray drive gear	NGERH0058AWZZ	6
136		Tray change lever	MLEVP0052AWZZ	3
137		Top joint lever	MLEVP0053AWZZ	1
138		Middle joint lever	MLEVP0054AWZZ	1
139		Bottom joint lever	MLEVP0055AWZZ	1
140		Motor Ass'y	RMOTV0373AFM1 for main cam	1
141		Motor Ass'y	RMOTV0373AFM1 for tray	1
142		Cam switch	QSW-F0353AFZZ	2
143		Tray switch	QSW-P0920AFZZ	4
201		Screw 2.6x4	XBPSD26P04000	4
202		Screw 2x7	XEBSD20P07000	3
203		Screw 2x6	XEBSD20P06000	3
204		Screw 2.6x12	XEBSD26P12000	4
205		Screw with washer 2.6x10	LX-EZ0005AWFD	4

Ref. No.	Part No.	Part Name	Remarks	Q'ty
TRAVERES SECTION				
1		Middle gear	NGERH0011AWZZ	1
2		Draiv gear	NGERH0012AWZZ	1
3		Guide railroller	MLEVP0010AWZZ	1
4		Guide shaft	NSFTM0002AWFW	1
5		Gum cushion (gray)	PCUSG0427AFSC	2
6	9370227103	Pickup unit	RCTRH8164AFZZ	1
7		Gum cushion (green)	PCUSG0004AWSA	1
8		Gum cushion (red)	PCUSG0001AWSA	1
9		Chassis with motor Ass'y	92LMTR1854CASY	1
10		Slide motor Ass'y	92LMTR1854BASY	1
11		Limit switch	QSW-F9001AWZZ	1
51		Screw 2.6x6	92L2R6S+6CZ	2
52		Screw 2x5	92L2TTS+5BB	2
53		Screw 2x3	92L2S+3PZ	2
54		Cut washer 1.5x3.8x0.25mm	92L1R5WC3R8R25	1

MEMO:

SCHEMATIC DIAGRAM (1/2)

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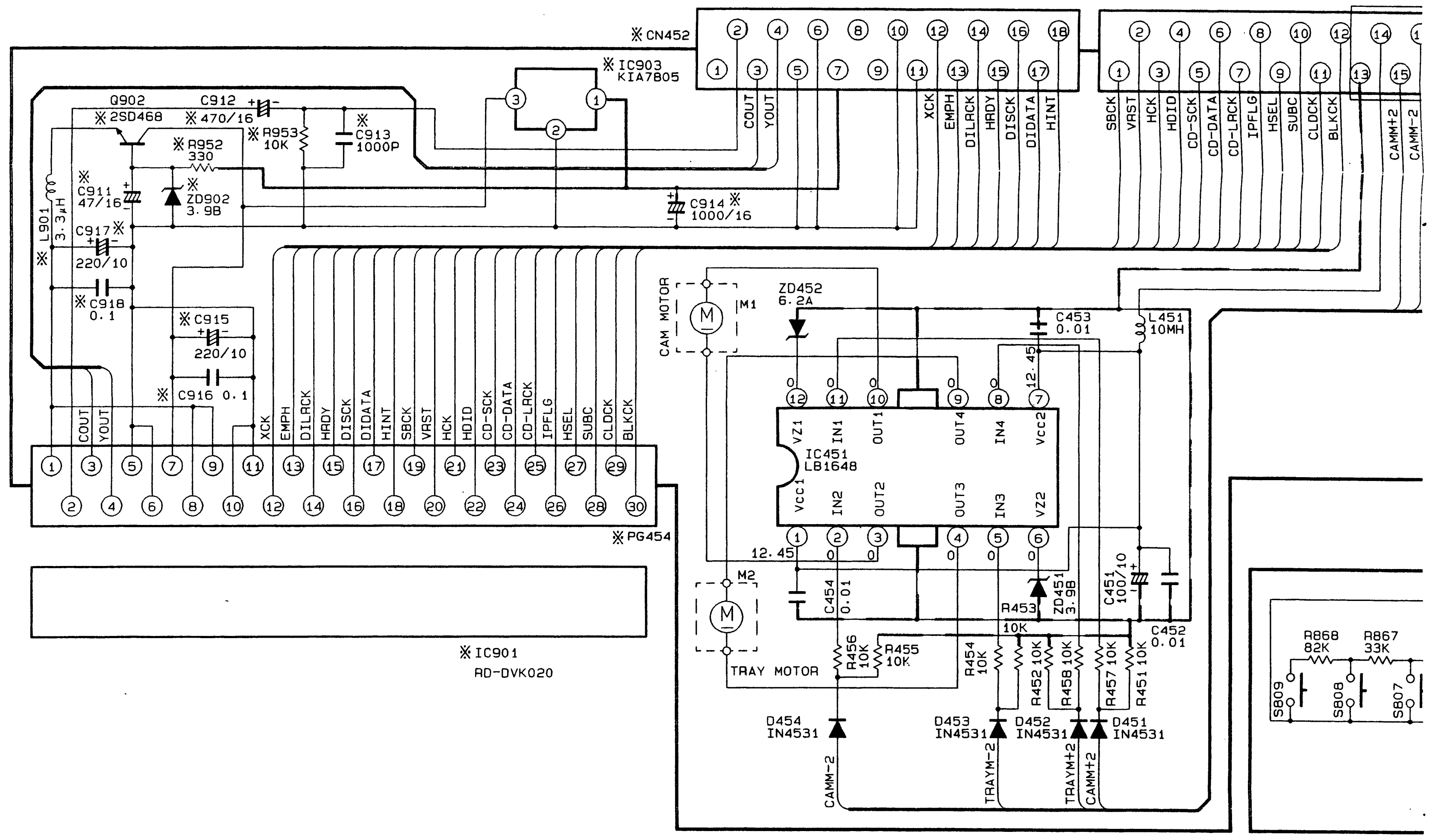
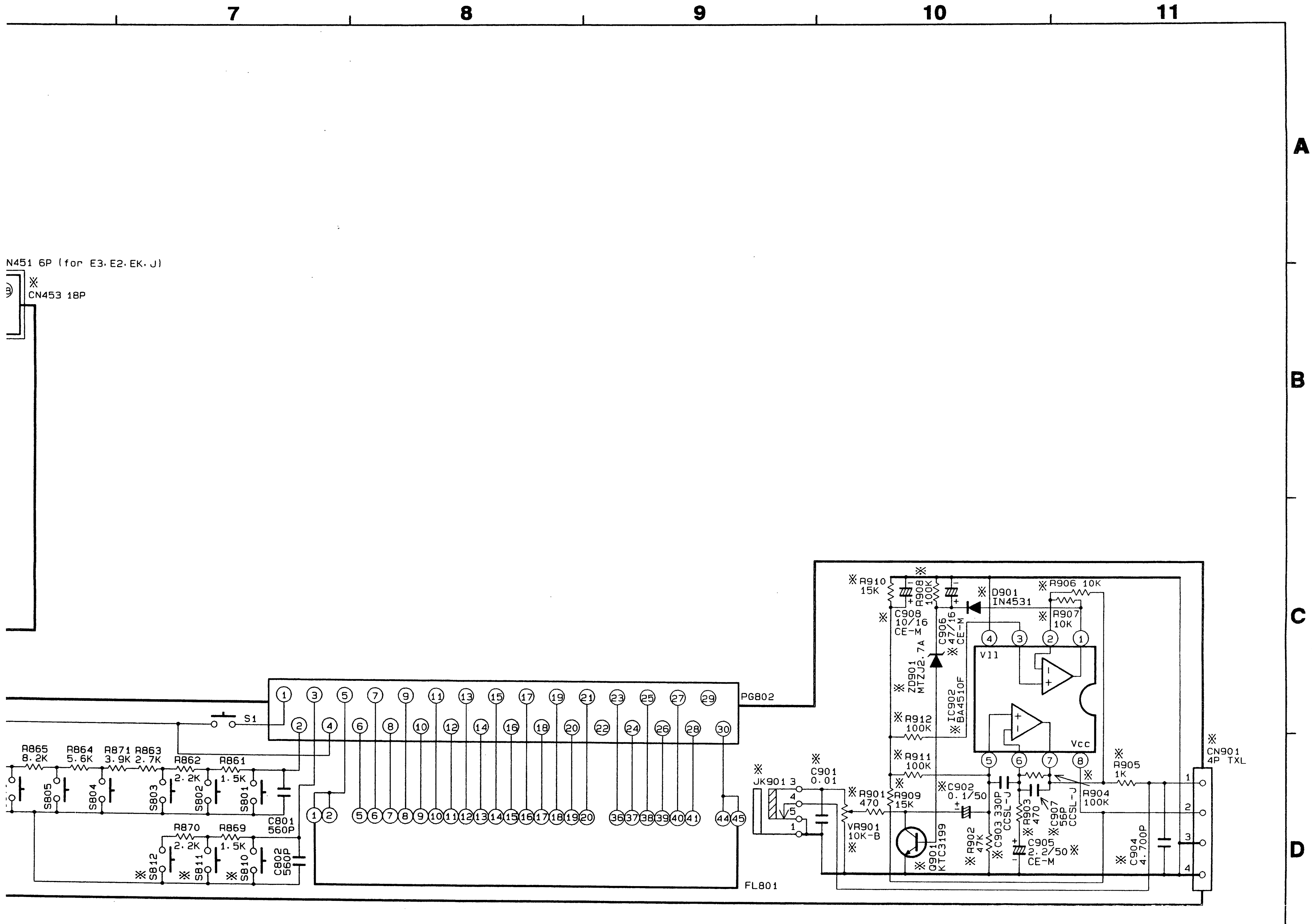


※CN452
※IC903
KIA7805
Q902
※2SD468
C912
※470/16
※R953
10K
※C913
1000P
※R952
330
※ZD902
3.9B
※C911
47/16
L901
3.3μH
C917※
220/10
※C918
0.1
※C915
220/10
※C916 0.1
C914※
1000/16
COUT
YOUT
XCK
EMPH
DILRCK
HRDY
DISCK
DIDATA
HINT
SBCK
VRST
HCK
HDID
CD-SCK
CD-DATA
CD-LRCK
IPFLG
HSEL
SUBC
CLDCK
BLKCK
CAMM+2
CAMM-2
※PG454
※IC901
RD-DVK020
CAM MOTOR
M1
ZD452
6.2A
C453
0.01
L451
10MH
IC451
LB1648
VZ1
IN1
OUT1
OUT4
IN4
Vcc2
Vcc1
IN2
OUT2
OUT3
IN3
VZ2
12.45
M2
TRAY MOTOR
C454
0.01
R453
10K
ZD451
3.9B
C451
100/10
C452
0.01
R456
10K
R455
10K
R454
10K
R452 10K
R458 10K
R457 10K
R451 10K
D454
IN4531
D453
IN4531
D452
IN4531
D451
IN4531
TRAYM-2
TRAYM+2
R868
82K
R867
33K
S809
S808
S807

※ Only for E1·EA


7
8
9
10
11
A
B
C
D
N451 6P (for E3·E2·EK·J)
※ CN453 18P
PG802
S1
R865 8.2K
R864 5.6K
R871 3.9K
R863 2.7K
R862 2.2K
R861 1.5K
S805
S804
S803
S802
S801
C801 560P
R870 2.2K
R869 1.5K
※S812
※S811
※S810
C802 560P
FL801
※ JK901
C901 0.01
※R901 470
※R909 15K
VR901 10K-B ※
Q901 KTC3199
※R902 47K
※C902 0.1/50
※C903 330P CCSL-J
※R903 470
※C907 56P CCSL-J
C905 2.2/50 CE-M ※
※R904 100K
※R905 1K
※C904 4.700P
※CN901 4P TXL
※R910 15K
※R908 100K
※C908 10/16 CE-M
※C906 47/16 CE-M
※ZD901 MTZJ2.7A
※IC902 BA4510F
※R912 100K
※R911 100K
※D901 1N4531
※R906 10K
※R907 10K
V11
Vcc

E
SISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
PACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
OLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT
ON.
AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 240 kohms, the unit is detective.

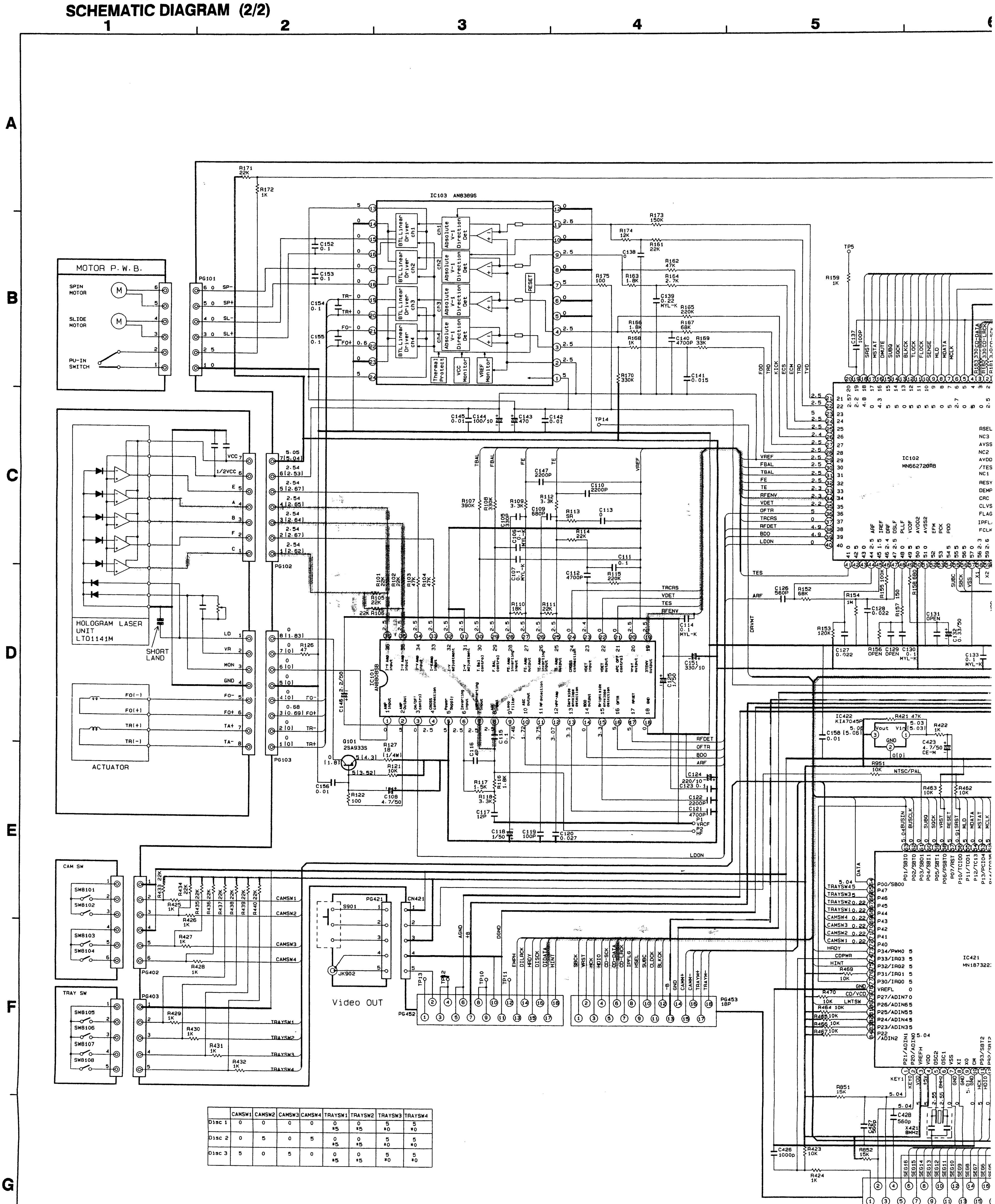
WARNING:
DO NOT return the unit to the customer unit the problem is located and corrected.

——— +B LINE
— — — −B LINE

E
F
G
H

CD PLAYER SECTION

SCHEMATIC DIAGRAM (2/2)


1
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5
A
B
C
D
E
F
G
MOTOR P. W. B.
SPIN MOTOR
SLIDE MOTOR
PU-IN SWITCH
PG101
IC103 AN8389S
BTL Linear Driver ch1
BTL Linear Driver ch2
BTL Linear Driver ch3
BTL Linear Driver ch4
Absolute V-I Direction Det
Thermal Protect
VCC Monitor
VREF Monitor
RESET
HOLOGRAM LASER UNIT LT01141M
SHORT LAND
PG102
PG103
ACTUATOR
IC101 AN8805SB
Q101 2SA933S
IC102 MN662720RB
IC422 KIA7045P
IC421 MN187322
X421 8MHz
CAM SW
SW8101
SW8102
SW8103
SW8104
TRAY SW
SW8105
SW8106
SW8107
SW8108
PG402
PG403
PG421
S901
JK902
Video OUT
CN421
PG452
PG453 18P
NTSC/PAL

	CAMSW1	CAMSW2	CAMSW3	CAMSW4	TRAYSW1	TRAYSW2	TRAYSW3	TRAYSW4
Disc 1	0	0	0	0	0 *5	0 *5	5 *0	5 *0
Disc 2	0	5	0	5	0 *5	0 *5	5 *0	5 *0
Disc 3	5	0	5	0	0 *5	0 *5	5 *0	5 *0

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO–MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

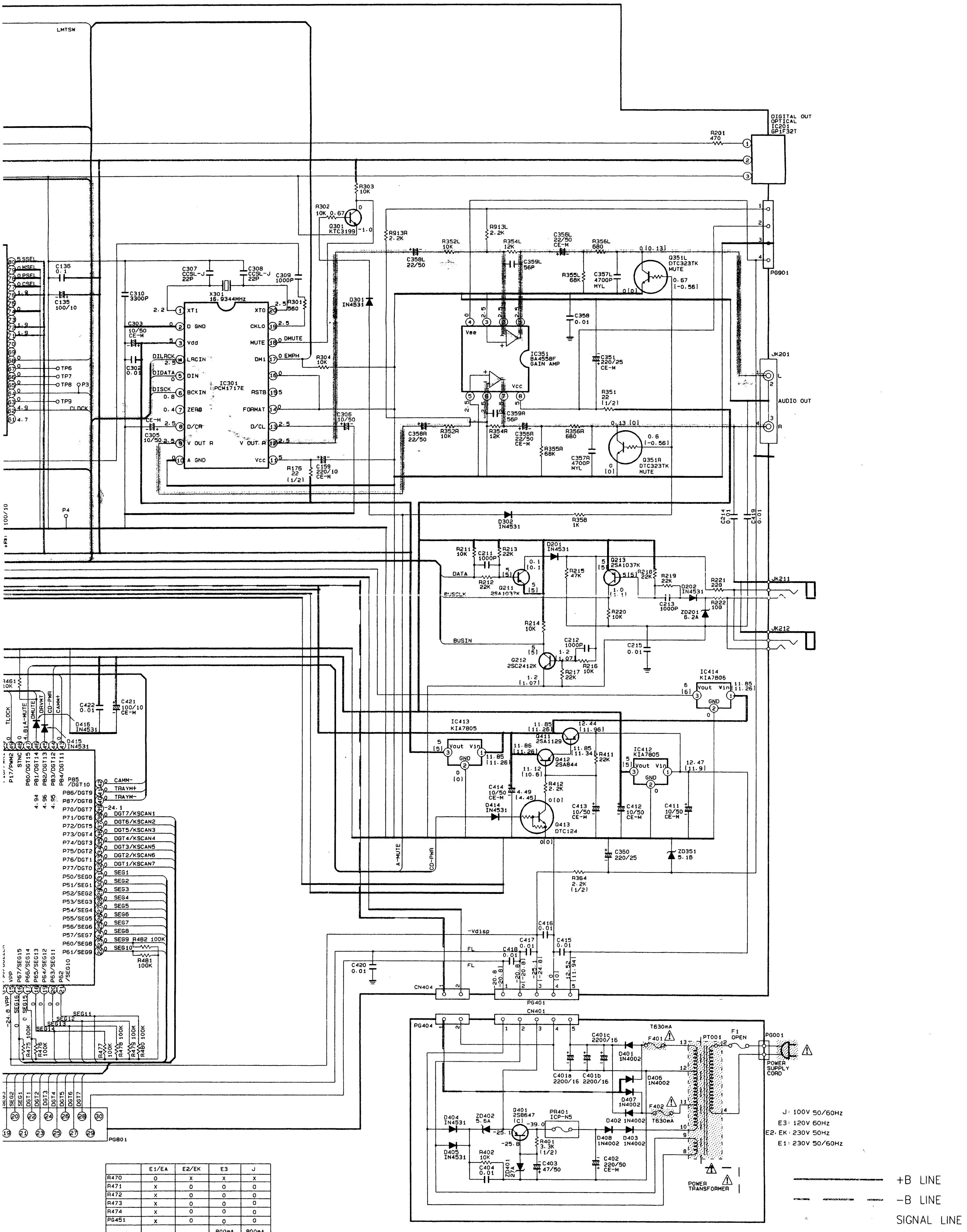
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 240 kohms, the unit is detective.

WARNING:

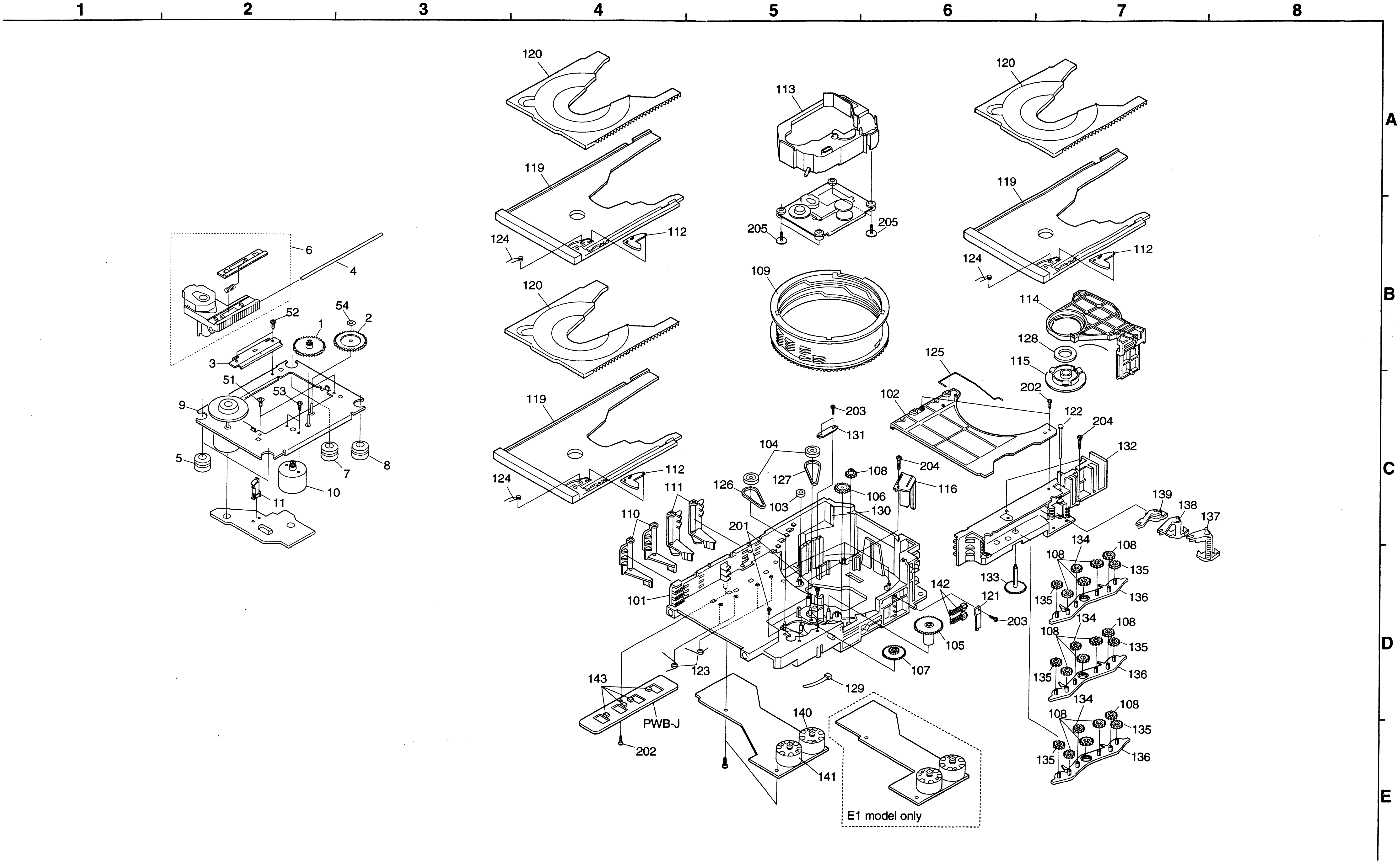
DO NOT return the unit to the customer unit the problem is located and corrected.


LMTSW
DIGITAL OUT OPTICAL IC201 GP1F32T
R201 470
PG901
JK201
AUDIO OUT
L
R
R303 10K
R302 10K
Q301 KTC3199
R913R 2.2K
R913L 2.2K
C358L 22/50
R352L 10K
R354L 12K
C359L 56P
C356L 22/50 CE-M
R356L 680
R355L 68K
C357L 4700P MYL
Q351L DTC323TK MUTE
C358 0.01
IC351 BA4558F GAIN AMP
C351 220/25 CE-M
R351 22 (1/2)
C358R 22/50
R352R 10K
R354R 12K
C359R 56P
C356R 22/50 CE-M
R356R 680
R355R 68K
C357R 4700P MYL
Q351R DTC323TK MUTE
D301 IN4531
C307 CCSL-J 22P
C308 CCSL-J 22P
X301 16.9344MHz
C309 1000P
R301 560
C310 3300P
C303 10/50 CE-M
C302 0.01
C305 10/50
IC301 PCM1717E
XT1
D GND
Vdd
LRCIN
DIN
BCKIN
ZERO
D/CR
V OUT R
A GND
XTO
CKLO
MUTE
DM1
RSTB
FORMAT
D/CL
V OUT L
Vcc
DMUTE
EMPH
R304 10K
C306 10/50
R176 22 (1/2)
C159 220/10 CE-M
C136 0.1
C135 100/10
SSEL
MSEL
PSEL
CSEL
TP6
TP7
TP8
TP9
P3
P4
CLOCK
D302 IN4531
R358 1K
C214 0.01
C419 0.01
R211 10K
C211 1000P
R213 22K
D201 IN4531
R215 47K
Q213 2SA1037K
R218 22K
R219 22K
R221 220
R222 100
D202 IN4531
ZD201 5.2A
C213 1000P
JK211
JK212
DATA
BUSCLK
BUSIN
R212 22K
Q211 2SA1037K
R214 10K
R220 10K
C212 1000P
R216 10K
R217 22K
Q212 2SC2412K
C215 0.01
IC414 KIA7805
IC413 KIA7805
IC412 KIA7805
Vout Vin GND
Q411 2SA1129
Q412 2SA844
R411 22K
R412 2.2K
C414 10/50 CE-M
D414 IN4531
Q413 DTC124
C413 10/50 CE-M
C412 10/50 CE-M
C411 10/50 CE-M
C350 220/25
ZD351 5.1B
R364 2.2K (1/2)
A-MUTE
CD-PWR
-Vdisp
FL
C416 0.01
C417 0.01
C418 0.01
C415 0.01
C420 0.01
CN404
PG401
CN401
PG404
R461 10K
C422 0.01
C421 100/10 CE-M
D416 IN4531
D415 IN4531
TLOCK
A-MUTE
DMUTE
CD-PWR
CAMM+
CAMM-
TRAYM+
TRAYM-
P86/DGT9
P87/DGT8
P70/DGT7
P71/DGT6
P72/DGT5
P73/DGT4
P74/DGT3
P75/DGT2
P76/DGT1
P77/DGT0
P50/SEG0
P51/SEG1
P52/SEG2
P53/SEG3
P54/SEG4
P55/SEG5
P56/SEG6
P57/SEG7
P60/SEG8
P61/SEG9
DGT7/KSCAN1
DGT6/KSCAN2
DGT5/KSCAN3
DGT4/KSCAN4
DGT3/KSCAN5
DGT2/KSCAN6
DGT1/KSCAN7
SEG1
SEG2
SEG3
SEG4
SEG5
SEG6
SEG7
SEG8
SEG9
SEG10
R482 100K
R481 100K
SEG11
SEG12
SEG13
SEG15
SEG16
R475 100K
R476 100K
R477 100K
R478 100K
R479 100K
R480 100K
PG801
C401c 2200/16
D401 1N4002
F401 T630mA
PT001
F1 OPEN
PG001
POWER SUPPLY CORD
C401a 2200/16
C401b 2200/16
D406 1N4002
D407 1N4002
F402 T630mA
D404 IN4531
ZD402 5.6A
Q401 2SB647
PR401 ICP-N5
D402 1N4002
D408 1N4002
D403 1N4002
D405 IN4531
R402 10K
C404 0.01
ZD401 27A
R401 3.3K (1/2)
C403 47/50
C402 220/50 CE-M
POWER TRANSFORMER
J: 100V 50/60Hz
E3: 120V 60Hz
E2, EK: 230V 50Hz
E1: 230V 50/60Hz
+B LINE
-B LINE
SIGNAL LINE

	E1/EA	E2/EK	E3	J
R470	O	X	X	X
R471	X	O	O	O
R472	X	O	O	O
R473	X	O	O	O
R474	X	O	O	O
PG451	X	O	O	O
F401/402	T630mA	T630mA	800mA 250V	800mA 250V
PT001	BT00903	BT00903	BT00902	BT00901

EXPLODED VIEW OF CD MECHANISM

CD PLAYER SECTION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121
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107
136
123
143
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108
140
108
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PWB-J
136
202
135
141
E1 model only

DENON

COMPARATIVE PARTS LIST

RECEIVER SECTION

ADDENDUM PARTS LIST OF EXPLODED VIEW
UDRA-M7 (Receiver)

Ref No.	Part Name	Part No.			
		U.S.A./Canada Model	Europe Model	U.K. Model	Asia Model
14	Function button	9LP C022 61	9LP C022 61	9LP C022 61	9LP C022 62
15	Display button	9LP C022 81	9LP C022 81	9LP C022 81	9LP C022 82
16	Power button	9LP C022 91	9LP C022 91	9LP C022 91	9LP C022 92
17	Volume knob ass'y	9LP C023 01	9LP C023 01	9LP C023 01	9LP C023 02
18	Tone knob	9LP C023 31	9LP C023 31	9LP C023 31	9LP C023 32
22	Front panel (AL)	9LP M048 71	9LP M048 72	9LP M048 72	9LP M048 74

CD PLAYER SECTION

ADDENDUM PARTS LIST OF EXPLODED VIEW
UDCM-M7 (Compact Disc Player)

Ref No.	Part Name	Part No.			
		U.S.A./Canada Model	Europe Model	U.K. Model	Asia Model
15	Button (CD)	9LP C021 51	9LP C021 51	9LP C021 51	9LP C021 53
16	Button (P)	9LP C021 61	9LP C021 61	9LP C021 61	9LP C021 62
18	CD tray panel (1)	9LP H045 07	9LP H045 07	9LP H045 07	9LP H045 04
19	CD tray panel (2)	9LP H045 08	9LP H045 08	9LP H045 08	9LP H045 05
20	CD tray panel (3)	9LP H045 09	9LP H045 09	9LP H045 09	9LP H045 06
22	Front metal (CD)	9LP M048 01	9LP M048 01	9LP M048 01	9LP M048 03
28	Mic knob	—	—	—	9LP C021 72

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